Southeastern Pomo Grammar

By

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PREFACE

This phonological and grammatical sketch of the Southeastern Pomo language is based on data which I gathered as a fieldworker for the Survey of California and other Indian Languages, between 1965 and 1968. I undertook three field trips during this period, each lasting from eight to ten weeks. I received research funds from the Survey and from the Phillips Fund of the American Philosophical Society.

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Secondly, I would like to thank Abraham Halpern, whose extremely thorough field notes on Southeastern Pomo, gathered as part of a survey of all seven Pomo languages in 1939-1940, enriched my own work considerably. The people that Halpern worked with were from an earlier generation, and discussions and re-elicitations of his materials with Albert Thomas proved extremely valuable.

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PART ONE - INTRODUCTION

Chapter One. Introduction

1.1. Linguistic Affiliations and Geography

Southeastern Pomo is one of seven distinct languages comprising the Pomoan family. Sapir classified Pomo as part (c) of the Northern Hokan branch of the Hokan stock, within the Hokan-Coahuiltecan group of the Hokan-Siouan superstock.[1]

Six of the seven Pomo languages were spoken in an area extending from a point sixty miles north of San Francisco, northward for ninety miles, and from the Pacific Coast eastward about fifty miles. The seventh language, Northeastern Pomo, was spoken east of this area, across the Inner Coast Range.[2] Southeastern Pomo was spoken in an area surrounding East Lake and Lower Lake, in Lake County. The area extended from approximately the town of Clear Lake Oaks at the north, to the bottom of Lower Lake at the south. The Southeastern Pomos inhabited two modern sites: the Lower Lake Rancheria on the northern bank of Cache Creek, about one and a half miles northeast of the town of Lower Lake; and the Sulphur Bank Rancheria, on the eastern shore of East Lake, the eastern arm of Clear Lake, at a point about one-half mile north of the Sulphur Bank mine.[3]

All of the informants available at the time of my fieldwork were from Sulphur Bank.[4] Dialect divergences between Sulphur Bank and Lower Lake Southeastern Pomo seem to be minimal, however, restricted to a small number of lexical differences.

1.2. Informants

Although there are still about a dozen speakers of Southeastern Pomo, I was able to work with only five people. Three of these, John and Effie Kelsey and Albert Thomas, all in their late 50's, still use the language on a daily basis. Harry Johnson, in his late 70's, speaks Pomo with them occasionally. Jim Brown, also in his 70's, had not spoken the language actively for about thirty years, but was able to recall a great deal.

Texts were elicited from Jim Brown, Harry Johnson and John Kelsey. Most of the verb paradigm material was elicited from Albert Thomas, with whom I also re-elicited and analyzed all of Halpern's 1939-40 Southeastern Pomo texts and morphological data.

1.3. Scope of the Description

Because of the fact that no aspect of Southeastern Pomo phonology or grammar has ever been described, and because of the apparently imminent demise of this language, my fieldwork was directed towards an overview of the

language, rather than towards a deeper study of any single subsystem or group of related phenomena. It is hoped that the resulting sketch, which obviously can make no grandiose claims as to psychological validity or as a representation of the competence of a Southeastern Pomo speaker, will nonetheless be of some use to people interested in Hokan descriptive and historical studies, and in related fields.

An attempt has been made to structure the description so that it can be easily used by people with varying interests. All inflectional and derivational morphemes have been listed and semantically characterized in an inventory fashion, in addition to having been described as functional elements in syntactic processes. Given my limited knowledge of the language, the description of selected transformational processes is naturally the most speculative part of the dissertation.

No Pomo bibliography will be included, since extensive Pomo and Hokan-Coahuiltecan linguistic bibliographies have already been compiled by Robert Oswalt and Margaret Langdon, respectively.[5]

NOTES TO PART ONE

[1]Edward Sapir "Central and Northern American Languages" in David G. Mandelbaum, editor, Selected Writings of Edward Sapir. University of California Press(Berkeley and Los Angeles, 1951), page 173.

[2]Robert L. Oswalt, "The Internal Relationships of the Pomo Family of Languages" in XXXV Congreso Internacional de Americanistas (Mexico, 1964), vol. 2, page 413.

[3]S.A. Barrett, The Ethno-geography of the Pomo and Neighboring Indians. University of California Publications in American Archaeology and Ethnology, vol. 6, no. 1(February, 1908), pages 204-209.

[4]Barrett refers to this site as xná day "balsa landing", and to the site on Rattlesnake Island, on Clear Lake just opposite Sulphur Bank as elém. The informants I worked with called Sulphur Bank elém and Rattlesnake Island, elém mdon "Elem Island."

[5]In Robert L. Oswalt, A Kashaya Grammar. Unpublished Ph.D. dissertation, University of California at Berkeley, pages 11-17; and in Margaret Langdon,"Bibliography of Hokan-Coahuiltecan", March, 1968(unpublished).

PART TWO - PHONOLOGY

Chapter 2. Phonetics

2.1. Phonetic Inventory

In this section the distinctive segment types of Southeastern Pomo will be listed, that is, those segments which must be distinguished at a systematic phonetic level, before phonetic detail rules converting binary to n-ary valued matrices operate. All of these segments except for ə, č, $\dot{\check{c}}$ and ŋ are also present at the systematic phonemic level. All schwas are products of the Pretonic Vowel Epenthesis rule, č and $\dot{\check{c}}$ are products of the Palatal Backing rule, and ŋ is produced by the Nasal Assimilation rule.

b		d						i		u
p	t	ṭ	c	(č)	k	q		e	(ə)	o
$\dot{p}$	$\dot{t}$	$\dot{ṭ}$	$\dot{c}$	($\dot{\check{c}}$)	$\dot{k}$	$\dot{q}$	ʔ		a	
f		s		š	x	χ	h	Vowel Length (•)		
m		n				(ŋ)		Stress		
		(r)	l							
w				y						

2.2. Articulatory Descriptions

The articulation of the segments listed in 2.1. will be described in this section. Several informal statements of semi-systematic low-level phonetic alternations will be made.

2.21. Obstruents

2.21.1. Voiced Stops

This series is defective by comparison with the voiceless and glottalized series, having only two members, b and d. Both are rather fortis in articulation, and voiced throughout their duration.

The phone d, like its voiceless and glottalized counterparts, is usually articulated in roughly the same position as the English alveolar stops, but may be retroflexed, especially in the environment of post-velar consonants, as in [x̣óḍoḍ] 'gopher snake'. Other examples of b and d are [ʔábk̓o] 'dreamer, story-teller', [bál] 'tongue', [c̓uwálbu] 'thumb', [bədá] 'creek' and [dúyṭḷat] 'he turns around'.

2.21.2. Voiceless Stops

Southeastern Pomo distinguishes two apical stops, t and ṭ, in both the voiceless and glottalized series. t is an apico-interdental to apico-dental stop, and ṭ is an apico-alveolar to retroflexed apical stop. The

range of articulatory variation is a result of differences both between idiolects and within single idiolects, as a result of both random variation and phonetic conditioning such as that noted for d.

c is a palato-alveolar affricate for the most part, but is articulated further back in the palatal region when a palatal vowel or glide follows(see the Palatal Backing rule in 4.2), for some speakers.

The k-q distinction is basically that between a velar and a post-velar stop, although articulatory position may not always be the primary factor. The post-velar stop is typically more fortis in articulation, and there may be considerable x̣-affrication with q, even a failure to effect closure at times. In such instances, especially in word-final position, q is quite difficult to distinguish from x̣.

Examples of the voiceless stops are [púkit] 'straight', [pá?šem] 'ten', [pú·du] 'cigar', [kápoṭe] 'coat'(p occurs relatively rarely in native vocabulary, more often in Spanish loans), [kəmát] 'ride, sit, bear fruit', [kəmáṭ] 'large sp. of squirrel', [cínqa] ~ [čínqa] 'hang something up', [cáduwa] 'north', [cécěš] 'tanbark tree', [cúkuy] 'flower, pet', [xkál] 'paddling, rowing', [x̣qál] 'blackfish', [x̣qáq] 'quail' and [céx̣ayquyquy] 'star'.

2.21.3. Glottalized Stops

The glottalized stops are articulated in the same positions as the plain voiceless stops. Depending on the speaker they may be mildly popped or ejected with great force. Examples are [p̓ál] 'cheek', [p̓ísaχo] 'large sp. of weed', [t̓ó] 'neck', [t̓akala] 'bat', [fút̓] 'teal', [ʈ̓íqa] 'to whip', [ʈ̓ɐfálam] 'dirty', [k̓óʈ̓] 'mouse', [c̓úbc̓ubkit] 'sharp, pointed', [c̓íc̓ik̓ob] 'wild berry', [ʔík̓] 'choking', [q̓á] 'foot' and [q̓ufúmat] 'dark'.

2.21.4. Spirants

Southeastern Pomo has only a voiceless spirant series. f is labio-dental, š is palatal, and s, x and χ are articulated in the same positions as the corresponding stops. As noted with the velar and post-velar stops, articulatory position may not be the primary effector of the x-χ distinction. Not only does x seem to be less fortis than χ, but the velar spirant also seems to be accompanied by a spreading and tensing of the lips during its articulation. Examples of the spirants are [fʔá] 'mushroom', [fnóʈ] 'pelican', [mufúl] 'wormwood', [sdáq̓ʈa] 'devil', [šášlab] 'hair net, burden net', [šbé bq̓òq̓] 'coot', [xá] 'fish', [χá] 'water', [xubá] 'body', [χɐbá] 'fog' and [hédabaq] 'foreign'.

2.21.5. Sonorants

The non-syllabic sonorants consist of the nasals m, n and ŋ(which is always a product of the Nasal Assimilation Rule), the lateral l, and semivowels w and y. l is always "light", with no velar co-articulation. There is also a flap r which sometimes occurs in Spanish loans, but is usually replaced by d or l, for example /tódu/ ~ /tóru/ 'bull', /ʔédedu/ ~/ʔéredu/ 'blacksmith' and /sómlilu/ 'hat'.

There are six vowels, schwa occurring only epenthetically before stress. They are all lax, with the approximate phonetic qualities [I], [ɛ], [a], [ə], [U] and [ɔ]. There is some tendency to tense vowels in word-final syllables.

Examples of the sonorants are [mbác] 'paternal grandfather', [móloq] 'skeleton', [məlálmac̀] 'blanket', [nántac̀it] 'think', [qəʔón] 'raw, alive', [c̀éŋqat] 'stick something in the ground', [wélkic̀] 'mean, vicious', [yówsqe] 'sideposts, studs', [yú] 'snow', [ʔelémay] 'half, middle', and [bəcílin] 'tall'.

2.3. Feature Analysis

2.31. Theoretical Framework

The feature theory I will use is basically that presented in The Sound Pattern of English. This system

describes Southeastern Pomo phonetics and phonological processes more adequately than any other I have seen. Binarity of feature values is assumed for all phonological rules. While phonetic detail rules, mapping binary onto n-ary values are considered to be a necessary part of the phonological component, none will be given, because of the theoretical and instrumental problems involved. I do not assume that such rules are necessarily universally specified, however.[1]

One problem in the specification of the stops should be mentioned. In Chomsky and Halle's phonetic theory the claim is made that in languages possessing both dental and alveolar stops in distinctive opposition, the actual positions of articulation are determined secondarily, by low-level phonetic rules. They claim that the distinction is manifested primarily by a feature "Distributed", which is roughly parallel to the traditional distinction between apical and laminal articulation.[2]

Distributed is defined in the following manner (page 312):

> Distributed sounds are produced with a constriction that extends for a considerable distance along the direction of air flow; nondistributed sounds are produced with a constriction that extends only for a short distance in this direction.

Although I have made no instrumental measurements on this for Southeastern Pomo, my observations are that the dental

articulation is typically made by an occlusion extending from the tongue apex, placed directly against the underside of the teeth, the tip extending slightly beyond the teeth, and backwards to effect some laminal contact on the front part of the alveolar ridge. The articulation of the alveolar stops, on the other hand, shows less extension along the direction of air flow, varying between a solely laminal occlusion against the central part of the alveolar ridge, to a more apical closure at about the same position, or somewhat further back.

In addition, there seem to be other articulatory mechanisms which aid in distinguishing the dental from the alveolar stops. Word-finally the plain dental stop may be affricated, producing an easily audible [t^{θ}]. And the alveolar stops d, ṭ and ṭ̓ may be considerably retroflexed, as noted in 2.21.1.

Although I do not have conclusive evidence one way or the other as to the suitability of the Distributed feature to describe this distinction in Pomo, it is a reasonable hypothesis, and will be utilized in this study.

2.32. Systematic Phonetic Feature Matrix

The following matrix is a characterization of Southeastern Pomo segments at a systematic phonetic level. Systematic phonemic matrices will be presented in 3.3.

	b	d	p	t	ṭ	c	č	k	q	p̓	t̓
sonorant	-	-	-	-	-	-	-	-	-	-	-
syllabic	-	-	-	-	-	-	-	-	-	-	-
consonantal	+	+	+	+	+	+	+	+	+	+	+
coronal	-	+	-	+	+	+	-	-	-	-	+
anterior	+	+	+	+	+	+	-	-	-	+	+
high	-	-	-	-	-	-	+	+	-	-	-
low	-	-	-	-	-	-	-	-	-	-	-
back	-	-	-	-	-	-	-	+	+	-	-
round	-	-	-	-	-	-	-	-	-	-	-
distributed	+	-	+	+	-	-	-	-	-	+	+
glottal closure	-	-	-	-	-	-	-	-	-	+	+
nasal	-	-	-	-	-	-	-	-	-	-	-
lateral	-	-	-	-	-	-	-	-	-	-	-
continuant	-	-	-	-	-	-	-	-	±	-	-
delayed release	-	-	-	±	-	+	+	-	±	-	-
glottal pressure	-	-	-	-	-	-	-	-	-	+	+
heightened subglottal pressure	-	-	±	±	±	±	±	±	±	-	-
voiced	+	+	-	-	-	-	-	-	-	-	-
strident	-	-	-	-	-	+	+	-	-	-	-
length	-	-	-	-	-	-	-	-	-	-	-
stress	-	-	-	-	-	-	-	-	-	-	-

	t̪	c̪	č̪	k̪	q̪	ʔ	f	s	š	x	x̪	h	m	n	ŋ
son	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
syll	-	-	-	-	-	-	-	-	-	-	-	-	±	±	±
cons	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
cor	+	+	-	-	-	-	-	+	-	-	-	-	-	+	-
ant	+	+	-	-	-	-	+	+	-	-	-	-	+	+	-
high	-	-	+	+	-	-	-	-	+	+	-	-	-	-	-
low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
back	-	-	-	+	+	-	-	-	-	+	+	-	-	-	+
round	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
distr	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
glot cl	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-
nasal	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
lat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cont	-	-	-	-	-	-	+	+	+	+	+	+	-	-	-
del rel	-	+	+	-	+	-	-	-	-	-	-	-	-	-	-
glot pres	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-
ht sbg pr	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
voiced	-	-	-	-	-	-	-	-	-	-	-	±	+	+	+
strid	-	+	+	-	-	-	+	+	+	+	+	-	-	-	-
length	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
stress	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	w	y	l	r	i	e	ə	a	u	o
son	+	+	+	+	+	+	+	+	+	+
syll	-	-	±	-	+	+	+	+	+	+
cons	-	-	+	+	-	-	-	-	-	-
cor	-	-	+	+	-	-	-	-	-	-
ant	-	-	+	+	-	-	-	-	-	-
high	+	+	-	-	+	-	-	-	+	-
low	-	-	-	-	-	-	-	+	-	-
back	+	-	-	-	-	-	+	+	+	+
round	+	-	-	-	-	-	-	-	+	+
distr	-	-	-	-	-	-	-	-	-	-
glot cl	-	-	-	-	-	-	-	-	-	-
nasal	-	-	-	-	-	-	-	-	-	-
lat	-	-	+	-	-	-	-	-	-	-
cont	+	+	+	+	+	+	+	+	+	+
del rel	-	-	-	-	-	-	-	-	-	-
glot pres	-	-	-	-	-	-	-	-	-	-
ht sbg pr	-	-	-	-	-	-	-	-	-	-
voiced	+	+	+	+	+	+	+	+	+	+
strid	-	-	-	-	-	-	-	-	-	-
length	-	-	-	-	±	±	-	±	±	±
stress	-	-	-	-	±	±	-	±	±	±

Chapter 3. Pre-phonology

In this chapter, in section 3.1., I will present morpheme structure conditions which relate fully specified systematic phonemic matrices to minimally redundant lexical representations of morphemes. Both fully and minimally specified systematic phonemic matrices will be given in section 3.2.[3]

3.1. Morpheme Structure Conditions

3.11. Segment Structure Conditions

An unordered set of if-then conditions relating complete feature specifications of individual segments to minimally redundant specifications will be given in this section. The application of these conditions to the matrix in section 3.22. will result in the matrix in section 3.21.

1. [-son] $\longrightarrow$ $\begin{bmatrix} -\text{syll} \\ +\text{cons} \\ -\text{low} \\ -\text{round} \\ -\text{nasal} \\ -\text{lat} \\ -\text{length} \end{bmatrix}$

2. [+son] $\longrightarrow$ $\begin{bmatrix} -\text{glot cl} \\ -\text{del rel} \\ -\text{glot pres} \\ +\text{voiced} \\ -\text{strid} \\ -\text{distr} \end{bmatrix}$

3. [+syll] ⟶ [+son, -cons, -cor, -ant, -distr, -nasal, -lat, +cont]

4. [-syll] ⟶ [-length]

5. [-cons] ⟶ [+son, -cor, -ant, -nasal, -lat, +cont]

6. [+cor] ⟶ [-high, -low, -back, -round]

7. [+ant] ⟶ [-high, -low, -back, -length]

8. [+high] ⟶ [-low]

9. [+low] ⟶ [+syll, -high, +back, -round]

10. [+round] ⟶ [-low, +back]

11. [+distr] ⟶ [+ant, -del rel]

12. [+glot cl] ⟶ [-son, -cont, -voiced]

13. [+nasal] ⟶ [+son, -syll, +cons, +ant, -round, -lat, -cont]

14. [+lat] ⟶ [+son, -syll, +cons, +cor, +ant, -distr, -nasal, +cont]

15. [+cont] ⟶ [-glot cl, -del rel, -glot pr]

16. [+del rel] ⟶ [-son, +cor, +ant, -distr, -cont, -voiced, +strid]

17. [+glot pr] ⟶ [+glot cl]

18. [+ht sbg pr] ⟶ [-cor, -ant, -high, -back, -glot cl, +cont, -del rel, -glot pr, +strid]

19. [+voiced] → [-glot cl, -strid]

20. [-voiced] → [-son]

21. [+strid] → [-son, -voiced]

22. [-son, +voiced] → [+ant, -cont, -glot pr]

3.12. Sequence Structure Conditions

An unordered set of sequence structure conditions, characterizing redundancies in feature specifications of phonemes, will now be given.

1. d and h do not occur as the first element of a consonant sequence.

$$\sim \left\{ \begin{bmatrix} -\text{son} \\ +\text{voiced} \end{bmatrix}, \begin{bmatrix} -\text{son} \\ -\text{ant} \\ -\text{high} \\ -\text{back} \\ +\text{cont} \end{bmatrix} \right\} \quad [-\text{syll}]$$

2. h and ʔ do not occur morpheme-finally.

$$\sim \begin{bmatrix} -\text{son} \\ -\text{ant} \\ -\text{high} \\ -\text{back} \end{bmatrix} +$$

3. All morpheme-final two-consonant sequences have a resonant as the first member.

$$[-\text{syll}] \longrightarrow \begin{bmatrix} +\text{son} \\ +\text{cons} \end{bmatrix} / \_\_ \; [-\text{syll}] +$$

4. The only voiceless segments occurring after x and x̣ are velar and post-velar stops and ʔ.

$$[-\text{voiced}] \longrightarrow \left\{ \begin{bmatrix} +\text{back} \\ -\text{cont} \end{bmatrix} \; \begin{bmatrix} +\text{glot cl} \\ -\text{glot pr} \end{bmatrix} \right\} / \begin{bmatrix} +\text{back} \\ +\text{cont} \\ -\text{voiced} \end{bmatrix} \_\_$$

5. There are no vowel sequences.

$$\sim [+\text{syll}] \; [+\text{syll}]$$

6. The only voiceless stops that can follow t, ṫ, ṭ or ṭ̇ are homorganic.

$$\begin{bmatrix} -\text{cont} \\ -\text{voiced} \end{bmatrix} \longrightarrow \begin{bmatrix} +\text{cor} \\ \alpha\text{distr} \\ -\text{del rel} \end{bmatrix} / \begin{bmatrix} +\text{cor} \\ \alpha\text{distr} \\ -\text{del rel} \\ -\text{voiced} \end{bmatrix} \_\_$$

7. Glottalized stops are never followed by glottalized stops.

$$\sim \; [+\text{glot pr}] \; [+\text{glot pr}]$$

8. Spirants are never followed by spirants.

$$\sim \begin{bmatrix} -\text{son} \\ +\text{cont} \end{bmatrix} \; \begin{bmatrix} -\text{son} \\ +\text{cont} \end{bmatrix}$$

9. w and y are never followed by stops, except for ?.

$$\begin{bmatrix} -\text{son} \\ -\text{cont} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{glot cl} \\ -\text{glot pr} \end{bmatrix} \; / \; \begin{bmatrix} +\text{son} \\ -\text{syll} \\ -\text{cons} \end{bmatrix} \; —$$

10. Plain voiceless stops are never followed by h.

$$\sim \begin{bmatrix} -\text{cont} \\ -\text{glot cl} \\ -\text{voiced} \end{bmatrix}$$

11. l is never followed by a spirant.

$$\sim \; [+\text{lat}] \; \begin{bmatrix} +\text{cont} \\ -\text{voiced} \end{bmatrix}$$

12. The only geminate consonant sequences are tt and ss.

$$[\psi \text{specified segment}] \; [\psi \text{specified segment}] \rightarrow$$

$$\begin{bmatrix} +\text{cor} \\ \alpha\text{distr} \\ -\alpha\text{cont} \\ -\text{voiced} \end{bmatrix} \; \begin{bmatrix} +\text{cor} \\ \alpha\text{distr} \\ -\alpha\text{cont} \\ -\text{voiced} \end{bmatrix}$$

13. b is never followed by a nasal.

$$\sim \begin{bmatrix} -\text{son} \\ +\text{voiced} \end{bmatrix} \quad [+\text{nasal}]$$

14. p and $\dot{p}$ do not occur as the first member of a two-consonant sequence.

$$\sim \begin{bmatrix} -\text{son} \\ +\text{ant} \\ -\text{cor} \end{bmatrix} \quad [-\text{syll}]$$

15. Dental and alveolar stops are not followed by s or š.

$$\sim \begin{bmatrix} -\text{son} \\ +\text{cor} \\ -\text{cont} \end{bmatrix} \quad \begin{bmatrix} -\text{son} \\ +\text{cont} \\ \{[+\text{cor}], [+\text{high}]\} \end{bmatrix}$$

16. There are no two-stop sequences of k, $\dot{k}$, q and $\dot{q}$.

$$\sim \begin{bmatrix} -\text{cont} \\ +\text{back} \end{bmatrix} \quad \begin{bmatrix} -\text{cont} \\ +\text{back} \end{bmatrix}$$

17. The only two-consonant sequences with p or $\dot{p}$ as the second member are sp, $s\dot{p}$, mp and $q\dot{p}$ (This may be accidentally due to the rarity of p and $\dot{p}$).

$$[-\text{syll}] \quad \begin{bmatrix}+\text{ant}\\-\text{cor}\\-\text{cont}\end{bmatrix} \longrightarrow \left\{ \begin{bmatrix}-\text{son}\\+\text{cor}\\+\text{cont}\end{bmatrix} \quad \begin{bmatrix}-\text{cor}\\+\text{nas}\end{bmatrix} \quad \langle \begin{bmatrix}-\text{high}\\+\text{back}\\-\text{cont}\end{bmatrix} \rangle \right\} \begin{bmatrix}+\text{ant}\\-\text{cor}\\\langle +\text{glot pr}\rangle\\-\text{cont}\\-\text{voiced}\end{bmatrix}$$

18. The only two-consonant sequence with k or q as the first member and x or x̣ as the second member is qx̣.

$$\begin{bmatrix}+\text{back}\\-\text{cont}\end{bmatrix} \quad \begin{bmatrix}-\text{son}\\+\text{back}\\+\text{cont}\end{bmatrix} \longrightarrow \begin{bmatrix}-\text{high}\\-\text{glot cl}\end{bmatrix} \quad [-\text{high}]$$

19. f is never followed by a labial consonant.

$$\sim \begin{bmatrix}-\text{son}\\-\text{cor}\\+\text{ant}\\+\text{cont}\end{bmatrix} \quad \begin{bmatrix}-\text{syll}\\-\text{cor}\\+\text{ant}\end{bmatrix}$$

20. š is not followed by c or ċ.

$$\sim \begin{bmatrix}-\text{son}\\+\text{high}\\-\text{back}\end{bmatrix} \quad [+\text{del rel}]$$

21. The only two-consonant sequences with n as the first member are nḱ, nx̣, nw and ny.

$$\begin{bmatrix}+\text{cor}\\+\text{nas}\end{bmatrix}\ [-\text{syll}] \longrightarrow [\quad]\ \left\{\begin{bmatrix}+\text{high}\\+\text{back}\\+\text{glot pr}\end{bmatrix}\ \begin{bmatrix}-\text{high}\\+\text{back}\\+\text{cont}\end{bmatrix}\ \begin{bmatrix}-\text{syll}\\-\text{cons}\\+\text{high}\end{bmatrix}\right\}$$

22. The only consonant sequences with w as the first member are w?, ws, and wy.

$$\begin{bmatrix}-\text{syll}\\-\text{cons}\\+\text{high}\\+\text{round}\end{bmatrix}\ [-\text{syll}] \longrightarrow [\quad]\ \left\{\begin{bmatrix}+\text{glot cl}\\-\text{glot pr}\end{bmatrix}\ \begin{bmatrix}+\text{cor}\\+\text{cont}\\-\text{voiced}\end{bmatrix}\ \begin{bmatrix}-\text{syll}\\-\text{cons}\\+\text{high}\end{bmatrix}\right\}$$

23. The only consonant sequences with y as the first member are yx and yh.

$$\begin{bmatrix}-\text{syll}\\-\text{cons}\\+\text{high}\\-\text{round}\end{bmatrix}\ [-\text{syll}] \longrightarrow [\quad]\ \begin{bmatrix}-\text{ant}\\\alpha\text{high}\\\alpha\text{back}\\+\text{cont}\\-\text{voiced}\end{bmatrix}$$

24. l does not occur before a spirant.

$$\sim\ [+\text{lat}]\ \begin{bmatrix}-\text{son}\\+\text{cont}\end{bmatrix}$$

25. Most verb stems are of the form (C)CV(·)(C).

$$[_{Vstem} + ([-syll]) [-syll] [+syll] ([-syll]) +]_{Vstem}$$

These sequence structure conditions account for 384 of the 432 non-existing two-consonant sequences (out of a mathematically possible 26^2=676 different sequences). The following gaps in the set of occurring two-consonant sequences are not accounted for, and are thought to be non-systematic:

bṭ, bf, cṭ, ct̓, cṭ̓, ck̓, cq̓, cf, cm, kt̓, c̓p, c̓ṭ, c̓q, c̓n, k̓t, k̓ṭ, k̓c, k̓f, k̓š, k̓n, q̓d, q̓p, q̓t, q̓c, q̓s, q̓š, q̓m, ft, fc, fk, ft̓, fc̓, fy, sṭ, sṭ̓, št, šq, šp̓, št̓, šk̓, lt, lṭ, lc, lt̓, lk̓, ln, ly, ʔf.

3.2. Systematic Phonemic Feature Matrices

3.21. Fully Specified Systematic Phonemic Matrix

	b	d	p	t	ṭ	c	k	q	p̓	t̓	ṭ̓	c̓	k̓	q̓	ʔ
sonorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
syllabic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
consonantal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
coronal	-	+	-	+	+	+	-	-	-	+	+	+	-	-	-
anterior	+	+	+	+	+	+	-	-	+	+	+	+	-	-	-
high	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-
low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
back	-	-	-	-	-	-	+	+	-	-	-	-	+	+	-
round	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
distributed	+	-	+	+	-	-	-	-	+	+	-	-	-	-	-
glottal closure	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+
nasal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
lateral	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
continuant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
delayed release	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-
glottal pressure	-	-	-	-	-	-	-	-	+	+	+	+	+	+	-
height. subglot. pressure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
voiced	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-
strident	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-
length	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	f	s	š	x	x̣	h	m	n	w	y	l	r	i	e	a	u	o
son	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+
syll	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+
cons	+	+	+	+	+	+	+	+	-	-	+	+	-	-	-	-	-
cor	-	+	-	-	-	-	-	+	-	-	+	+	-	-	-	-	-
ant	+	+	-	-	-	-	+	+	-	-	+	+	-	-	-	-	-
high	-	-	+	+	-	-	-	-	+	+	-	-	+	-	-	+	-
low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
back	-	-	-	+	+	-	-	-	+	-	-	-	-	-	+	+	+
round	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	+
distr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
glot cl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nasal	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-
lat	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
cont	+	+	+	+	+	+	-	-	+	+	+	+	+	+	+	+	+
del rel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
glot pres	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ht sbg pr	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
voiced	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+
strid	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
length	-	-	-	-	-	-	-	-	-	-	-	-	±	±	±	±	±

3.22. Incompletely Specified Systematic Phonemic Matrix

	b	d	p	t	ṭ	c	k	q	p̓	t̓	ṭ̓	c̓	k̓	q̓	ʔ
sonorant	-	-													
syllabic															
consonantal															
coronal	-	+	-	+	+		-	-	-	+	+		-	-	
anterior					+		-	-			+		-	-	-
high							+	-					+	-	-
low															
back							+	+					+	+	
round															
distributed	+	-	+	+	-		-	-	+	+	-		-	-	-
glottal closure			-	-	-	-	-	-							+
nasal															
lateral															
continuant			-	-	-		-	-							
delayed release		-			-	+	-	-			-	+	-	-	-
glottal pressure			-	-	-	-	-	-	+	+	+	+	+	+	-
height. subglot. pressure															
voiced	+	+	-	-	-		-	-							
strident			-	-	-		-	-	-	-	-		-	-	-
length															

	f	s	š	x	χ	h	m	n	w	y	l	r	i	e	a	u	o
son												+					
syll									-	-		-	+	+		+	+
cons									-	-		+					
cor	-	+	-	-	-		-	+				+					
ant	+	+	-	-	-							+					
high			+	+	-				+	+			+	-		+	-
low														-	+		
back			-	+	+				+	-			-	-			
round									+	-		-	-	-		+	+
distr																	
glot cl																	
nasal							+	+				-					
lat											+	-					
cont	+	+	+	+	+							+					
del rel																	
glot pres																	
ht sbg pr						+											
voiced																	
strid	+	+	+	+	+												
length													±	±	±	±	±

Chapter 4. Phonological Rules

4.1. Introduction

This chapter will consist of a partially ordered set of phonological rules which derive phonetic representations from sequences of morphemes in their underlying or morphophonemic form. All rules operate obligatorily, unless there is a statement of optionality.

According to Chomsky and Halle's phonological theory,[4] before phonological rules can operate on surface structures, a series of readjustment rules must be applied. Included among the processes which these rules effect is the assigning of underlying phonological representations to grammatical morphemes. This removes all morphologically conditioned alternations which are unique to individual morphemes out of the phonology, which then includes only statements of some degree of generality. These readjustment rules will be stated in the appropriate sub-sections of the Morphology chapters.

4.2. Rule Ordering

The phonological rules require strict ordering of the following sequences(the numbers referring to the rules are the sub-section numbers of 4.3).

The notation should be read in this way: 5-6 means that there is an ordering relationship between 5 and 6; 6/7 means that there is no ordering necessary

between 6 and 7. 5-6/7 means that both 6 and 7 must be ordered after 5. Rules listed on separate lines are ordered independently of each other.

1-2-3-4-5-6/7

8/9/10-11-12/13/15/17

13-16/17-19-20-21

1-6/11-12-17-24

4.3. Phonological Rules

4.3.1. Stress Placement

$$V \rightarrow \acute{V} \quad / \quad \left\{ \begin{matrix} \# \\ \langle Seg \rangle \end{matrix} \right\} + C_1^n \_\_ \ldots \; / \; \_\_ \left\{ \begin{matrix} \ldots]_{N,V,Adj,Adv} \\ \langle \ldots]_{stem} \rangle \end{matrix} \right\}$$

$$[+syll] \rightarrow [+stress] \quad / \quad \left\{ \begin{matrix} [-seg \\ +word\ b] \\ \langle [+seg] \rangle \end{matrix} \right\} + [-syll]_1^n \_\_ \ldots \; /$$

$$\left[\overline{\left\{ \begin{matrix} +N \\ +V \\ +Adj \\ +Adv \end{matrix} \right\}} \right]$$
$$\langle +stem \rangle$$

This rule applies primary stress to the first vowel of every word of a major category, as well as to the first vowel of a major stem. The latter statement

is necessary in order that the first vowel of a reduplicated stem, or of a stem preceded by a directional prefix may still receive stress, although it is not in word-initial position.

Examples of the application of this rule follow:

/ca+qla+m+t/ 'it flew down to the ground'

1. cá+qla+m+t

11j. cá+qla+ma+t

24. cáqlamat

/ci·cala/ 'peas(Spanish loan)'

1. cí·cala

/qlacac/ 'woodpecker'

1. qlácac

3. qəlácac

Surface bracketing will be given for the following example:

$\#[_{V}[_{\text{dir pref}}$ lil $]_{\text{dir pref}}+[_{\text{stem}}$ kʈ̓a $]_{\text{stem}}+[_{\text{suf}}$ n $]_{\text{suf}}$ $+[_{\text{suf}}$ c̓ $]_{\text{suf}}+[_{\text{fin suf}}$ t $]_{\text{fin suf}}]_{V}\#$

/lil+kʈ̓a+n+c̓+t/ 'he chased them into the corral'

1. líl+kʈ̓a+n+c̓+t

líl+kʈ̓á+n+c̓+t

3. líl+kəʈ̓á+n+c̓+t

6. líl+kəṭà+n+c'+t

lln. líl+kəṭà+n+c'i+t

24. lílkəṭànc'it

/q'e+q'e+k+c'+t/ 'he cleared his throat'

1. q'é+q'e+k+c'+t

q'é+q'é+k+c'+t

6. q'é+q'è+k+c'+t

lln. q'é+q'è+k+c'i+t

24. q'éq'èkc'it

4.3.2 Sonorant Syllabicization

$$\begin{Bmatrix} m \\ l \end{Bmatrix} \longrightarrow \begin{bmatrix} \underline{m} \\ \underline{l} \end{bmatrix} \quad / \quad \# \_\_ C_{\text{homorganic}}$$

$$[\text{-syll}] \longrightarrow [\text{+syll}] \quad / \quad \# \begin{bmatrix} \overline{\text{+son}} \\ \text{+cons} \\ \text{+ant} \\ \alpha\text{cor} \\ \beta\text{distr} \end{bmatrix} \begin{bmatrix} \text{-syll} \\ \text{+ant} \\ \alpha\text{cor} \\ \beta\text{distr} \end{bmatrix}$$

This rule states that the resonants m and l become syllabic when followed by a consonant which has the same point of articulation. It must be ordered before the Pretonic Vowel Epenthesis rule to prevent a vowel insertion in such a position. Presumably n is

excluded from this process only because Sequence Structure Condition 21 prevents it from preceding an alveolar consonant.

Examples:

/lde/ 'mountain lion'

1. ldé
2. l̩dé

/lt̩a/ 'shoulder blade'

1. lt̩á
2. l̩t̩á

/mpu+k+t/ 'he whistles'

1. mpú+k+t
2. m̩pú+k+t
11n. m̩pú+ki+t
24. m̩púkit

/mbo+l+k+t/ 'it exploded'

1. mbó+l+k+t
2. m̩bó+l+k+t
11n. m̩bó+l+ki+t
24. m̩bólkit

4.3.3. Pretonic Vowel Epenthesis (Optional)

$$\phi \rightarrow \text{ə} \; / \; \left\{ \begin{matrix} \# \\ C \end{matrix} \right\} \; [_{\text{stem}} \; C \_\_ C\acute{V} \ldots]_{\text{stem}}$$

$$\phi \rightarrow \begin{bmatrix} +\text{syll} \\ -\text{cons} \\ -\text{high} \\ -\text{low} \\ -\text{back} \end{bmatrix} \; /$$

$$\left\{ \begin{matrix} \# \\ [-\text{syll}] \end{matrix} \right\} \; [_{\text{stem}} [-\text{syll}] \_\_ [-\text{syll}] \; [+\text{stress}] \ldots]_{\text{stem}}$$

This rule inserts a schwa between stem-initial consonants, preceding the stress vowel. It is optional in its operation for the most part, although it is more frequent in the most difficult to articulate consonant clusters, such as two stops. It is less frequent in connected discourse when the preceding word ends in a vowel, as well as almost never occurring when the cluster is preceded by a vowel in the same word.

Examples:

/blay/ 'blood'

1. bláy

3. bəláy

4c. buláy

/qbandu χle/ 'white oak tree'

1. qbándu χlé

3. qəbándu χlé ~ qəbándu χəlé

6. qəbàndu χəlé

/ksuţ+k+t/ 'he poked the fire'

1. ksút+k+t

3. kəsúţ+k+t

11n. kəsúţ+ki+t

24. kəsúţkit

4.3.4. Schwa Modification (Optional)

This rule will be stated in five subparts.

a) $$ə \rightarrow i \;/\; \left\{ \begin{bmatrix} C \_\_ \end{bmatrix} \begin{bmatrix} \_\_ y \end{bmatrix} \begin{bmatrix} \_\_ C \begin{Bmatrix} i \\ e \end{Bmatrix} \end{bmatrix} \right\} $$

$$ \begin{bmatrix} -high \\ +back \end{bmatrix} \rightarrow \begin{bmatrix} +high \\ -back \end{bmatrix} \;/\; \left\{ \begin{bmatrix} [+del\ rel] & \begin{bmatrix} -low \\ -round \\ +syll \end{bmatrix} & & \\ & & \begin{bmatrix} +son \\ +high \\ -back \\ -syll \end{bmatrix} & \\ & [-syll] & & \begin{bmatrix} +syll \\ -back \end{bmatrix} \end{bmatrix} \right\} $$

b) ə → e / __ C e

[+back] → [-back] / [-high, -low, -round, +syll] [-syll] [-high, -low, -back, +syll]

c) ə → u / { [{q, b, m, x} __ *] , [__ C {u, o}] }

[-high, -round] → [+high, +round] / { [{[-high, +back, -syll], [+ant, -cor, +distr]} [-low, +back, +syll] *] , [[-low, +back, +syll] [-syll] [+round, +syll]] }

The asterisk indicates that the first part of 4c is a mirror image rule: The segment adjacent to the changing schwa may be on either side of it.

d) ə → o / __ {k, c} o

[-round] → [+round] / [-high, -low, +back, +syll] {[-syll], [-syll, +high, +back, -cont]} [-high, +back, +round, +syll]

e) ə → ɨ / {x, k'} __ ya

[-high] → [+high] / [+high, +back, -syll] [-low, +back, -round] [+son, +high, -back, -syll] [+low, +syll]

This is an optional rule stating observed tendencies of the epenthetic schwa to color in assimilation to an adjacent consonant or to the following stressed vowel. There is no ordering claim made for subparts of the rule.

Examples:

/cya+cya+k+n/ 'green'

1. cyá+cya+k+n

cyá+cyá+k+n

3. cəyá+cyá+k+n

4a. ciyá+cyá+k+n

6. ciyá+cyà+k+n

11n. ciyá+cyà+ki+n

19. čiyá+cyà+ki+n

čiyá+čyà+ki+n

24. čiyáčyàkin

/sdi+q+a/ 'swallow it'

1. sdí+q+a

3. sədí+q+a

4a. sidí+q+a

24. sidíqa

/ʔke/ 'to catch'

1. ʔké

3. ʔəké

4a. ʔiké

~4b. ʔeké

/xwan/ 'dance house'

1. xwán

3. xəwán

4c. xuwán

/mwat+a/ 'talk!'

1. mwát+a

3. məwát+a

4c. muwát+a

24. muwáta

/bca+k+a/ 'drink!'

1. bcá+k+a

3. bəcá+k+a

4c. bucá+k+a

24. bucáka

/cnu/ 'word'

1. cnú

3. cənú

4c. cunú

/ʔqol/ 'cradle basket'

1. ʔqól

3. ʔəqól

4c. ʔuqól

/ʔk̓ob/ 'angelica sprout'

1. ʔk̓ób

3. ʔək̓ób

4d. ʔok̓ób

/q̓bo+k+t/ 'it's dry'

1. q̓bó+k+t

3. q̓əbó+k+t

4c. q̓ubó+k+t

~4d. q̓obó+k+t

lln. q̓ubó+ki+t ~ q̓obó+ki+t

24. q̓ubókit ~ q̓obókit

/xya/ 'head'

1. xyá

3. xəyá

4e. xɨyá

/k̓ya/ 'chicken hawk'

1. k̓yá

3. k̓əyá

4e. k̓ɨyá

/qsil+t/ 'it's cold'

1. qsíl+t

3. qəsíl+t

4e. qɨsíl+t

lln. qɨsíli+t

24. qɨsílit

4.3.5. Stress Movement (Optional)

$$V^{-\ə}\ ?\ \acute{V} \longrightarrow \acute{V}\ ?\ V$$

$$\begin{bmatrix} +\text{syll} \\ -\text{cons} \\ \begin{Bmatrix} -\text{back} \\ +\text{low} \\ +\text{round} \end{Bmatrix} \end{bmatrix} \quad \begin{bmatrix} +\text{glot cl} \\ -\text{glot pr} \end{bmatrix} \quad [+\text{stress}] \longrightarrow [+\text{stress}] \ [\ ] \ [-\text{stress}]$$

This rule, which shifts the stress back onto the epenthetic vowel if the intervening consonant is glottal stop, has been observed only a few times, but has been included because of its possible generality.

Example:

/k?ilto/ 'yellow'

1. k?ílto

3. kə?ílto

4a. ki?ílto

5. kí?ilto

7. kíilto

4.3.6. Stress Reduction

$$\acute{V} \longrightarrow \grave{V} \;/\; [_{N} \cdots \_\_ \cdots] \cdots [_{V} \left\{ \begin{matrix} [_{\text{dir pref}} \;]_{\text{dir pref}} \\ [_{\text{stem}} \;]_{\text{stem}} \end{matrix} \right\}$$

$$[_{\text{stem}} \cdots \_\_ \cdots \;]_{\text{stem}} \cdots]_{V}$$

a) [+stress] $\longrightarrow$ [1stress]

b) [1stress] $\longrightarrow$ [2stress] /

$$[\; \overline{+N} \;] \cdots \left\{ \begin{matrix} [+\text{dir pref}] \\ [+\text{stem}] \end{matrix} \right\} \left[\begin{matrix} \overline{+V} \\ +\text{stem} \end{matrix} \right]$$

This rule reflects the fact that not all stresses in a Southeastern Pomo utterance are of equal intensity. Word-internally, the first stress is the stronger, any subsequent stress being reduced. Sententially, the verb seems to get the most stress, the other words in the sentence having their stress reduced by varying degrees.

The stress reduction process for sentences has not been worked out, but if it is systematic it may be either left-iterative or governed by some sort of transformational cycle--the observed data is ambiguous, since the verb, which is the word usually receiving the greatest stress, is usually the last element of the clause.

Examples:

/bk̓o+bk̓o+l+t/ 'the bird pecks all the time'

1. bk̓ó+bk̓o+l+t

bk̓ó+bk̓ó+l+t

3. bək̓ó+bk̓ó+l+t

6. bək̓ó+bk̓ò+l+t

11n. bək̓ó+bk̓ò+li+t

24. bək̓óbk̓òlit

/maɬ+m+ma+t/ 'he lay down'

1. máɬ+m+ma+t

máɬ+m+má+t

2. máɬ+m+má+t

6. máɬ+m+mà+t

24. máɬmmàt

/#ʔu+yi#wiy+aq#bdu#ba#x̌le#ki+c̓+t#/ 'That tree grew from my acorn'(that-my-acorn-agent-tree-grew)

1. #ʔú+yi#wíy+aq#bdú#ba#x̌lé#kí+c̓+t#

3. #ʔú+yi#wíy+aq#bədú#ba#x̌lé#kí+c̓+t#

4c. #ʔú+yi#wíy+aq#budú#ba#x̌lé#kí+c̓+t#

6. #ʔù+yi#wìy+aq#budù#ba#x̌lè#kí+c̓+t#

11n. #ʔù+yi#wìy+aq#budù#ba#x̌lè#kí+c̓i+t

24. #ʔùyi #wìyaq#budù#ba#x̌lè#kíc̓it#

4.3.7. Glottal Stop Deletion (Optional)

$$? \longrightarrow \emptyset \;/\; V \_\_ V$$

$$\begin{bmatrix} +\text{glot cl} \\ -\text{glot pr} \end{bmatrix} \longrightarrow \emptyset \;/\; \begin{bmatrix} -\text{cons} \\ +\text{syll} \end{bmatrix} \_\_ \begin{bmatrix} -\text{cons} \\ +\text{syll} \end{bmatrix}$$

This rule deletes glottal stops intervocalically.

Example:

/š?o/ 'acorn meal'

1. š?ó
3. šə?ó
4c. šu?ó
7. šuó

4.3.8. D-deletion

$$d \longrightarrow \emptyset \;/\; \_\_ C$$

$$\begin{bmatrix} -\text{son} \\ +\text{vd} \\ +\text{cor} \end{bmatrix} \longrightarrow \emptyset \;/\; \_\_ [-\text{syll}]$$

This rule deletes d when it occurs before a consonant.

Examples:

/lod+t/ 'my hair is falling out(many long objects fall down)'

1. lód+t

8. ló+t

24. lót

/bṭed+lay/ 'women'

1. bṭéd+lay

3. bəṭéd+lay

4a. biṭéd+lay

8. biṭé+lay

24. biṭélay

4.3.9. Semivowel Metathesis

$$CVy \rightarrow CyV \;/\; \begin{bmatrix} +\overline{\text{redup}} \\ \text{stem} \end{bmatrix} \; C$$

$$[-\text{syll}] \begin{bmatrix} +\text{syll} \\ \psi\text{spec seg} \end{bmatrix} \begin{bmatrix} +\text{son} \\ -\text{cons} \\ -\text{syll} \\ -\text{back} \\ \chi\text{spec seg} \end{bmatrix} \rightarrow$$

$$[-\text{syll}]\ [\chi\text{spec seg}]\ [\psi\text{spec seg}] \;/\; \begin{bmatrix} +\overline{\text{redup}} \\ \text{stem} \end{bmatrix} \; [-\text{syll}]$$

This rule states that when a stem of the shape CVy is reduplicated, the second part shows a metathesis of the vowel plus y when it is followed by a consonant. It has been observed so far only with the root /-qoy-/ 'weaving, cutting motion', but may operate more generally.

A notational device 'Ψ specified segment' is used in this and several other rules. Specified Segment is a shorthand device meaning "all the features of a fully specified matrix" and Ψ or any other Greek letter late in the alphabet is a variable over a configuration of all the +'s and-'s of that matrix. Such a segment is identified in the input by giving the minimum subset of these features.

Examples:

/s+qoy+qoy+m+t/ 'they were sawing logs'

1. s+qóy+qoy+m+t

s+qóy+qóy+m+t

3. sə+qóy+qóy+m+t

6. sə+qóy+qòy+m+t

9. sə+qóy+qòy+m+t

11j. sə+qóy+qyò+ma+t

24. səqóyqyòmat

/x̣+qoy+qoy+t/ 'they were felling trees'

1. x̣+qóy+qoy+t

x̣+qóy+qóy+t

6. x̣+qóy+qòy+t

9. x̣+qóy+qyò+t

24. x̣qóyqyòt

4.3.10. Stop Metathesis

$$m\acute{k}u \rightarrow mu\acute{k} \;/\; C \_\_ Seg^{-1}$$

$$\begin{bmatrix} +nas \\ -back \\ -cor \end{bmatrix} \quad \begin{bmatrix} +high \\ +back \\ +glot\ pr \\ \psi spec\ seg \end{bmatrix} \quad \begin{bmatrix} +syll \\ +high \\ +round \\ \chi spec\ seg \end{bmatrix} \rightarrow$$

$$[\ ] \quad [\chi spec\ seg] \quad [\psi spec\ seg] \;/\; [-syll] \_\_ [-lat]$$

This rule metathesizes the kú of the suffix /-mkú-/ 'reciprocal', when it is preceded by a consonant and followed by any consonant but l.

Examples:

/pu̯t̯+mkú+t/ 'they kissed each other'

1. pú̯t̯+mkú+t

10. pú̯t̯+muḱ+t

lln. pú̱t+muki+t

24. pú̱tmukit

/kda+n+mku+t/ 'those people are shooting each other'

1. kdá+n+mku+t

3. kədá+n+mku+t

10. kədá+n+muk+t

lln. kədá+n+muki+t

24. kədánmukit

4.3.11. Post-tonic Vowel Epenthesis

$$\emptyset \longrightarrow \begin{Bmatrix} <_1 a_1> \\ i \end{Bmatrix} \; / \; \left[\begin{array}{lll} \left\{ \begin{array}{l} C^{-sv} \\ \left\{ \begin{array}{l} C^{-son} \\ <_2 (C^{+son})_2> \end{array} \right\} \end{array} \right\} & \left\{ \begin{array}{l} \dot{C} \\ C \\ <_1 \left\{ \begin{array}{l} <_2 m_2> \\ q \end{array} \right\}_1> \end{array} \right\} & \left\{ \begin{array}{l} + C \\ + \left\{ \begin{array}{l} <_3 (V)_3> \\ C^{fin\ suf} \end{array} \right\} \# \\ + n\ C \end{array} \right\} \\ <_3 (C)_3> & <_3 nf\ suf_3> & \end{array} \right]$$

$$\emptyset \longrightarrow [+\text{syll}] \quad /$$

$$\left\{\begin{array}{l} \left[\begin{array}{l} [+\text{cons}] \\ \left\{\left[\begin{array}{l} -\text{syll} \\ \left\{\left[\begin{array}{l} -\text{son} \\ <_1(+\text{son})_1> \end{array}\right]\right\} \end{array}\right]\right\} \\ <_3([-\text{syll}])_3> \end{array}\right. \quad \left[\begin{array}{l} [+\text{del rel}] \\ \left[\begin{array}{l} -\text{syll} \\ \left\{\begin{array}{l} <_2[\begin{array}{l}+\text{nas}\\-\text{cor}\end{array}]_2> \\ [\begin{array}{l}-\text{high}\\+\text{back}\end{array}] \end{array}\right\} \end{array}\right] \\ <_3\text{-fin suf}_3> \end{array}\right] \left\{\left[\begin{array}{l} \\ \left\{<_1[\begin{array}{l}-\text{high}\\+\text{back}\\+\text{low}\end{array}]_1> \right. \\ \left. [\begin{array}{l}+\text{high}\\-\text{back}\end{array}] \right\} \end{array}\right]\right. \quad \left.\begin{array}{l} + [-\text{syll}] \\ \\ + \left\{\begin{array}{l} <_3([+\text{syll}])_3> \\ [\begin{array}{l}-\text{syll}\\+\text{fnsuf}\end{array}] \end{array}\right\} \\ \\ + [\begin{array}{l}+\text{nas}\\+\text{cor}\end{array}]\ [-\text{syll}] \end{array}\right\}$$

This rule inserts vowels into sequences of verb suffixes. The seventeen expansions of the fully collapsed rule follow:

a) $\emptyset \longrightarrow a \ / \ C \ m \ \_\_ \ + \ C$

b) $\emptyset \longrightarrow a \ / \ C^{-son} \ q \ \_\_ \ + \ C$

c) $\emptyset \longrightarrow i \ / \ C^{-sv} \ \dot{c} \ \_\_ \ + \ C$

d) $\emptyset \longrightarrow i \ / \ C^{-son} \ C^{-q,m} \ \_\_ \ + \ C$

e) $\emptyset \longrightarrow i \ / \ C^{sv} \ C^{son-m} \ \_\_ \ + \ C$

f) $\emptyset \longrightarrow a \ / \ C \ m^{nf\ suf} \ \_\_ \ + \ V \ \#$

g) $\phi \longrightarrow a \;/\; C \; q^{nf\ suf} \;\_\_\; + \; V \; \#$

h) $\phi \longrightarrow a \;/\; C \; m^{nf\ suf} \;\_\_\; + \; \#$

i) $\phi \longrightarrow a \;/\; C \; q^{nf\ suf} \;\_\_\; + \; \#$

j) $\phi \longrightarrow a \;/\; m \;\_\_\; C^{fin\ suf} \; \#$

k) $\phi \longrightarrow a \;/\; q \;\_\_\; C^{fin\ suf} \; \#$

l) $\phi \longrightarrow i \;/\; C \; C^{-m,q} \;\_\_\; + \; V \; \#$

m) $\phi \longrightarrow i \;/\; C \; C^{-m,q}_{nf\ suf} \;\_\_\; + \; \#$

n) $\phi \longrightarrow i \;/\; C^{-m,q} \;\_\_\; C^{fin\ suf} \; \#$

o) $\phi \longrightarrow a \;/\; m \;\_\_\; n \; C$

p) $\phi \longrightarrow a \;/\; q \;\_\_\; n \; C$

q) $\phi \longrightarrow i \;/\; C^{-m,q} \;\_\_\; n \; C$

lla-b state that an a is inserted following a sequence of non-sonorant consonant plus m or q, when this sequence is followed by morpheme boundary plus a consonant, and that the first consonant can be sonorant if it is followed by m.

Examples:

/ca+l+q+m+q+t/ 'they're rolling hoops along the ground'

1. cá+l+q+m+q+t

11a. cá+l+q+ma+q+t

11k. cá+l+q+ma+qa+t

24. cálqmaqat

/ʔqay+m+w+l+c̓+t/ 'he makes faces'

1. ʔqáy+m+w+l+c̓+t

3. ʔəqáy+m+w+l+c̓+t

11a. ʔəqáy+ma+w+l+c̓+t

11e. ʔəqáy+ma+li+c̓+t

11n. ʔəqáy+ma+w+li+c̓i+t

24. ʔəqáymawlic̓it

11c-e state that an i is inserted under the same conditions as a-c, except that the immediately preceding consonant is not m or q, and that if that consonant is c̓, any consonant(including sonorants)except for a semi-vowel may precede.

Example:

/kto+b+k+q+t/ 'he put it down on the ground'

1. któ+b+k+q+t

3. kətó+b+k+q+t

11d. kətó+b+ki+q+t

11k. kətó+b+ki+qa+t

24. kətóbkiqat

11f-i state that an a is inserted following two consonants, before a morpheme boundary plus an optional vowel, at the end of a word, when the second of the two consonants is m or q.

Examples:

/ʔsel+m tadapu/ 'wash cloth'

1. ʔsél+m tádapu

3. ʔəsél+m tádapu

11h. ʔəsél+ma tádapu

13. ʔəsél+am tádapu

24. ʔəsélam tádapu

/ɬlo+m+q+a/ 'turn it around!'

1. ɬló+m+q+a

11g. ɬló+m+qa+a

18. ɬló+m+qa+

24. ɬlómqa

11-l-m state that an i is inserted under the same conditions as in g-j, except that the second of the two consonants is not m or q.

Example:

/ʔwal+c̓+a/ 'duck!'

1. ʔwál+c̓+a

3. ʔəwál+c̓+a

11-1. ʔəwál+c̓i+a

18. ʔəwál+c̓i+

24. ʔəwálc̓i

11j-k state that an a is inserted following m or q, before a consonant which is a final-position suffix (unlike -c̓- in the above example), at the end of a word. 11n inserts an i under the same conditions, except that the preceding consonant is not m or q.

Example:

/c̓a+m+t/ 'they're hunting'

1. c̓á+m+t

11j. c̓á+ma+t

24. c̓ámat

11o-p insert an a following m or q, before a sequence of n plus a consonant. 11q inserts an i under the same conditions, except that the preceding consonant is not m or q.

Example:

/do+q+n+hu+t/ 'I got it from him'

1. dó+q+n+hu+t

11p. dó+qa+n+hu+t

24. dóqanhut

4.3.12. Vowel Lowering

$$\begin{bmatrix} <_1 i_1> \\ <_2 u_2> \end{bmatrix} \longrightarrow \begin{bmatrix} e \\ o \end{bmatrix} \; / \; \_\_ + \begin{Bmatrix} l \\ <_1 s_1> \\ <_2 \dot{c}_2> \end{Bmatrix}$$

$$[+\text{high}] \longrightarrow [-\text{high}] \; / \begin{bmatrix} \overline{+\text{syll}} \\ \begin{Bmatrix} <_1 -\text{back}_1> \\ <_2 +\text{back}_2> \end{Bmatrix} \end{bmatrix} + \begin{bmatrix} +\text{cor} \\ \begin{Bmatrix} [+\text{son}] \\ <_1 \begin{bmatrix} -\text{son} \\ +\text{cont} \end{bmatrix}_1> \\ <_1 \begin{bmatrix} -\text{son} \\ +\text{del rel} \end{bmatrix}_1> \end{Bmatrix} \end{bmatrix}$$

This rule lowers i and u to e and o, respectively. Lowering occurs morpheme-finally, i lowering before s, u before ċ, and both i and u before l. The rule is obligatory in its operation, except that i-lowering is optional before s.

Examples:

/ʔwal+ċ+l+t/ 'he ducked repeatedly'

1. ʔwál+ċ+l+t
3. ʔəwál+ċ+l+t
4c. ʔuwál+ċ+l+t
11c. ʔuwál+ċi+l+t
11o. ʔuwál+ċi+li+t
12. ʔuwál+ċe+li+t
24. ʔuwálċelit

/ca+mlu+l+t/ 'he ran around'

1. cá+mlu+l+t

lln. cá+mlu+li+t

12. cá+mlo+li+t

24. cámlolit

/ć́i+mḱu+ć+t/ 'those three are fighting each other'

1. ć́í+mḱu+ć+t

lln. ć́í+mḱu+ć́i+t

12. ć́í+mḱo+ć́i+t

24. ć́ímḱoć́it

/da f?ey+ć+s/ 'he didn't bother you'

1. da f?éy+ć+s

lln. da f?éy+ć́i+s

12. da f?éy+ć́e+s

24. da f?éyć́es

4.3.13. Word-final Vowel Metathesis

$$C\ V \rightarrow V\ C\ /\ \_\_\ \#\ /\ ]_{\text{non-final suf}}$$

$$\begin{bmatrix}-\text{syll}\\ \Psi\text{specseg}\end{bmatrix}\ \begin{bmatrix}+\text{syll}\\ \chi\text{specseg}\end{bmatrix} \longrightarrow \begin{bmatrix}+\text{syll}\\ \chi\text{specseg}\end{bmatrix}\ \begin{bmatrix}-\text{syll}\\ \Psi\text{specseg}\end{bmatrix} \ /\ [-\overline{\text{finsuf}}]\ \#$$

This rule metathesizes a word-final CV sequence, if that sequence does not include a final position suffix.

Examples:

/ʔšon+k/ 'to guess'

1. ʔšón+k
3. ʔəšón+k
11m. ʔəšón+ki
13. ʔəšón+ik
24. ʔəšónik

/ʔteć+mḱu/ 'twice' (ʔteć- 'to fold')

1. ʔtéć+mḱu
3. ʔətéć+mḱu
13. ʔətéć+muḱ
24. ʔətéćmuḱ

/ṫo+m+ć/ 'razor'

1. ṫó+m+ć
11m. ṫó+m+ći
13. ṫó+m+ić
24. ṫómić

4.3.14. Degemination

$$C_1 \; C_1 \rightarrow C_1 \; / \; C \; \_\_$$

$$[\Psi specseg] \; [\Psi specseg] \rightarrow [\Psi specseg] \; / \; [-syll] \; \_\_$$

This rule simplifies a geminate consonant cluster when a consonant precedes. Such a sequence has been found so far only with the suffix -tta- 'dual'.

Example:

/ʔxe+k+tta+t/ 'two make, fix things'

1. ʔxé+k+tta+t
3. ʔexé+k+tta+t
4b. ʔexé+k+tta+t
14. ʔexé+k+ta+t
24. ʔexéktat

4.3.15. Nasal Backing (Optional)

$$\left\{\begin{matrix} m \\ n \end{matrix}\right\} \rightarrow ŋ \; / \; \_\_ \; q$$

$$[+\text{nas}] \rightarrow \begin{bmatrix}-\text{high}\\+\text{back}\end{bmatrix} \;/\; \_\_ \begin{bmatrix}-\text{syll}\\-\text{high}\\+\text{back}\\-\text{cont}\end{bmatrix}$$

This rule changes m and n to ŋ, when a q follows. It is optional for m, and possible also for n.

Examples:

/će+m+q+t/ 'he stuck it in the ground'

1. ćé+m+q+t
11k. ćé+m+qa+t
15. ćé+ŋ+qa+t
19. čé+ŋ+qa+t
24. čéŋqat

/ʔša+m+q+t/ 'she dressed him'

1. ʔšá+m+q+t
11k. ʔšá+m+qa+t
(15. ʔšá+ŋ+qa+t)
24. ʔšámqat ~ ʔšáŋqat

4.3.16. Spirantization

$$\begin{Bmatrix}k\\q\end{Bmatrix} \rightarrow \begin{Bmatrix}x^{\circ} \;/\; \_\_\; q\\x \;/\; \_\_\; k\end{Bmatrix}$$

$$[-\text{cont}] \longrightarrow \begin{bmatrix} +\text{cont} \\ \alpha\text{high} \end{bmatrix} \; / \; \begin{bmatrix} -\text{son} \\ +\text{back} \end{bmatrix} \quad \begin{bmatrix} -\text{son} \\ \alpha\text{high} \\ +\text{back} \end{bmatrix}$$

This rule changes k or q to a velar or post-velar spirant, homorganic with the following velar or post-velar stop.

Examples:

/ʔyi+q+k+l+t/ 'he teaches all the time'

1. ʔyí+q+k+l+t
3. ʔəyí+q+k+l+t
11d. ʔəyí+q+ki+l+t
11n. ʔəyí+q+ki+li+t
12. ʔəyí+q+ke+li+t
16. ʔəyí+x+ke+li+t
24. ʔəyíxkelit

/cyo+cyo+k+q+t/ 'he rattled it; a rattlesnake rattles'

1. cyó+cyo+k+q+t
   cyó+cyó+k+q+t
6. cyó+cyò+k+q+t
11k. cyó+cyò+k+qa+t
16. cyó+cyò+x̣+qa+t
19. čyó+cyò+x̣+qa+t
    čyó+čyò+x̣+qa+t
24. čyóčyòx̣qat

4.3.17. Ejective Reduction (Optional)

$$\begin{Bmatrix} \dot{c} \\ \dot{k} \\ \dot{q} \end{Bmatrix} \longrightarrow ? \;/\; \_\_ \; k$$

$$\begin{bmatrix} \alpha\text{delrel} \\ -\alpha\text{back} \\ +\text{glotpr} \end{bmatrix} \longrightarrow \begin{bmatrix} -\text{delrel} \\ -\text{back} \\ -\text{glotpr} \end{bmatrix} \;/\; \_\_ \begin{bmatrix} +\text{high} \\ +\text{back} \\ -\text{cont} \end{bmatrix}$$

This rule optionally reduces $\dot{c}$, $\dot{k}$ and $\dot{q}$ to ?, when immediately preceding k. It may be obligatory for $\dot{k}$.

Examples:

/la$\dot{k}$+la$\dot{k}$+k+t/ 'he shakes his head from side to side'

1. lá$\dot{k}$+la$\dot{k}$+k+t

lá$\dot{k}$+lá$\dot{k}$+k+t

6. lá$\dot{k}$+là$\dot{k}$+k+t

11n. lá$\dot{k}$+là$\dot{k}$+ki+t

17. lá$\dot{k}$+là?+ki+t

24. lá$\dot{k}$là?kit

/$\dot{c}$iw+$\dot{c}$+k+t/ 'she's cooking'

1. $\dot{c}$íw+$\dot{c}$+k+t

11n. $\dot{c}$íw+$\dot{c}$+ki+t

17. $\dot{c}$íw+?+ki+t

24. $\dot{c}$íw?kit

/ṭoq̓+ṭoq̓+k+t/ 'it got soft'

1. ṭóq̓+ṭoq̓+k+t

ṭóq̓+ṭóq̓+k+t

6. ṭóq̓+ṭòq̓+k+t

11n. ṭóq̓+ṭòq̓+ki+t

17. ṭóq̓+ṭò?+ki+t

24. ṭóq̓ṭò?kit

4.3.18. Vowel Cluster Reduction

$$V \rightarrow \emptyset \;/\; V \;\_\_$$

$$\begin{bmatrix}+son\\+syll\\-cons\end{bmatrix} \rightarrow \emptyset \;/\; \begin{bmatrix}+son\\+syll\\-cons\end{bmatrix} \;\_\_$$

This rule deletes the second member of a two-vowel sequence.

Examples:

/sbu+l+k+a/ 'steal!'

1. sbú+l+k+a

3. səbú+l+k+a

4c. subú+l+k+a

11-1. subú+l+ki+a

18. subú+l+kí+

24. subúlki

/ʔki+a/ 'marry her!'

1. ʔkí+a
3. ʔəkí+a
18. ʔəkí+
24. ʔəkí

/hayu+it/ 'dog's'

1. háyu+it
18. háyu+t
24. háyut

/ti+ib/ 'for you(sg)(benefactive)'

1. tí+ib
18. tí+b
24. tíb

4.3.19. Affricate Palatalization

$$\begin{bmatrix} c \\ \text{,}c \end{bmatrix} \longrightarrow \begin{bmatrix} \check{c} \\ \text{,}\check{c} \end{bmatrix} \; / \; \_\_ \; \begin{Bmatrix} i \\ y \end{Bmatrix}$$

$$\begin{bmatrix}+\text{ant}\\+\text{cor}\\-\text{high}\end{bmatrix} \longrightarrow \begin{bmatrix}-\text{ant}\\-\text{cor}\\+\text{high}\end{bmatrix} \;/\; [+\overline{\text{del}}\text{rel}] \begin{bmatrix}+\text{son}\\-\text{cons}\\+\text{high}\\-\text{back}\end{bmatrix}$$

This rule moves palato-alveolar affricates further back into the palatal region, when followed by i or y.

Examples:

/ćićikob/ 'wild berry'

1. ćićikob

19. čičikob

/cil+m+k+t/ 'a breeze is blowing'

1. cíl+m+k+t

11a. cíl+ma+k+t

11n. cíl+ma+ki+t

19. číl+ma+ki+t

24. čílmakit

4.3.20. Liquid Palatalization

$$l \longrightarrow y \;/\; \_\_ \begin{Bmatrix}č\\ć\end{Bmatrix}$$

$$\begin{bmatrix}+\text{cons}\\+\text{cor}\\+\text{ant}\\-\text{high}\\+\text{lat}\end{bmatrix} \longrightarrow \begin{bmatrix}-\text{cons}\\-\text{cor}\\-\text{ant}\\+\text{high}\\-\text{lat}\end{bmatrix} \;/\; \_\_ \; \begin{bmatrix}-\text{son}\\+\text{high}\\+\text{delrel}\end{bmatrix}$$

This rule changes l to y, when it is followed by č or ǰ.

Example:

/bde+l+ǰ+t/ 'they're carrying them in their hands'

1. bdé+l+ǰ+t
3. bədé+l+ǰ+t
4a. bidé+l+ǰ+t
11c. bidé+l+ǰi+t
19. bidé+l+čǰi+t
20. bidé+y+čǰi+t
24. bidéyčǰit

4.3.21. Affricate Depalatalization

$$\begin{bmatrix}\check{c}\\ \check{j}\end{bmatrix} \longrightarrow \begin{bmatrix}c\\ j\end{bmatrix} \;/\; \_\_ \; i$$

$$\begin{bmatrix}-\text{ant}\\-\text{cor}\\+\text{high}\end{bmatrix} \longrightarrow \begin{bmatrix}+\text{ant}\\+\text{cor}\\-\text{high}\end{bmatrix} \;/\; [+\overline{\text{del}}\text{rel}] \quad \begin{bmatrix}+\text{son}\\-\text{cons}\\+\text{syll}\\+\text{high}\\-\text{back}\end{bmatrix}$$

This is an optional rule which changes palatal affricates back to palato-alveolar affricates, before i. It is necessary to first change c to č and then back optionally because Liquid Palatalization operates even if a c before i is not palatalized on the phonetic surface, but it will not operate on an l followed by a c which cannot undergo Affricate Palatalization.

The example given in 4.3.21. will serve as the example of Affricate Depalatalization. After rule 20 operates, rule 21 may optionally.

20. bidé+y+či+t

21. bidé+y+c̓i+t

24. bidéyc̓it

4.3.22. h-deletion

$$h \longrightarrow \emptyset \;/\; \_\_ \;\; C$$

[+htsbgpr] $\longrightarrow$ $\emptyset$ / __ [-syll]

This rule deletes h before a consonant. It might be considered to be related to Sequence Structure Condition 1, which states that h cannot precede a consonant. All examples of this rule which have been discovered so far involve the directional prefix /kuh-/ 'move to the outside of a enclosed space'.

Example:

/kuh+na+t/ 'many trees poke up through the ground'

1. kúh+na+t

kúh+ná+t

6. kúh+nà+t

22. kú+nà+t

24. kúnàt

4.3.23. Vowel Deletion

V $\longrightarrow$ $\emptyset$ / V C __ C V

[+syll] $\longrightarrow$ $\emptyset$ / [+syll] [-syll] __ [-syll] [+syll]

This rule deletes a vowel which is preceded by a vowel plus a single consonant, and followed by a single consonant plus a vowel.

As I am currently analyzing the problem of vowel insertion and deletion in Southeastern Pomo, this rule is necessary only within the pronominal system. An analysis of verb suffix sequences as consisting of mainly -CV- shaped morphemes, with this rule performing deletions was rejected in favor of an analysis in which suffixes of the shape -C- have vowels inserted by the Post-tonic Vowel Epenthesis rule. This latter analysis seems to be a less complex and ad hoc analysis of the verb than the former. Therefore, both processes of vowel deletion and vowel insertion are being posited for the language.

Examples:

/ʔo+mal+ay/ 'they(non-displaced)'

1. ʔó+mal+ay
23. ʔó+ml+ay
24. ʔómlay

/me+mal+ay+il/ 'them(near)'

1. mé+mal+ay+il
23. mé+ml+ay+il
24. mémlayil

/ʔo+med+it+ib/ 'for her(non-displaced, benefactive)'

1. ʔó+med+it+ib

23. ʔó+md+it+ib

24. ʔómditib

4.3.24. Morpheme Boundary Deletion

$$+ \longrightarrow \emptyset$$

$$\begin{bmatrix} -\text{seg} \\ +\text{Morpheme Boundary} \end{bmatrix} \longrightarrow \emptyset$$

This rule deletes all occurrences of morpheme boundary, which has no phonetic realization.

NOTES TO PART TWO

[1]Paul Postal, Aspects of Phonological Theory. Harper and Row (New York, 1968), pages 66-69.

[2]Noam Chomsky and Morris Halle, The Sound Pattern of English. Harper and Row (New York, 1968), pages 312-314.

[3]This section is based on the theoretical framework presented in Richard Stanley, "Redundancy Rules in Phonology", Language vol. 43 (1967), pages 393-436.

[4]Chomsky and Halle, pages 9-11.

PART THREE - VERB MORPHOLOGY

Chapter Five. Introduction and Positional Analysis

5.1. Introduction to the Morphology

Parts Three and Four will consist of an inventory of the grammatical morphemes of Southeastern Pomo, that is, inflectional and derivational affixes and postfixes, pronominal elements, and adverbials. Each entry will include the underlying phonological shape of the morpheme, a description of its syntactic-semantic properties, and examples of its use. Full sentence examples will be given only in those instances where the nature of the morpheme warrants it, such as a coordinating suffix.

The inventory nature of this section should be emphasized. Except for a positional analysis of the verb complex, a systematic treatment of the morphemes within the total grammar will not be undertaken. Information such as the mechanism of introducing a particular morpheme, whether by phrase structure rewrite or by transformational rule, will be given in Part Five.

5.2. Positional Analysis

A chart of the surface configuration of verb morpheme positional classes will be presented in this

section. The sequence of suffix positions represents a maximum extrapolation, since no single verb form contains a member of each position class. Note that several morphemes have been found to occur in more than one position, although not with a single verb stem, except when there is more than one occurrence of the causative suffix.

There are twelve suffixes which, due to a great deal of homonymy, have only four underlying representations among them: -q-, -m-, -k- and -c'-. To facilitate the interpretation of the examples given, each of these twelve morphemes will be indicated by the phonological shape with a subscript letter which indicates which morpheme is being represented, such as q_c, q_p, q_x, etc. This is a purely morphemic notation, and has no morphophonemic significance.

A distinction was made, in certain phonological rules in Chapter Four, between final position and non-final position suffixes. Position 14 contains those morphemes which are being called final position, including modal, aspectual, deverbalizing, and sentence conjoining elements. Every verb form must include one of these morphemes, and may additionally follow it with one of a number of interrogative, evidential, conjoining, and modal suffixes, listed in position 15. These latter

suffixes will be termed 'enclitics', because they follow morphemes which are, for phonological and syntactic reasons, called final position suffixes.

This chart serves as the Surface Suffix Ordering Constraint, as outlined in section 13.3.28.

DIRECTIONAL PREFIXES	+	INSTRUMENTAL PREFIXES	+	VERB ROOT	+	REDUPLICATIVE MORPHEMES
						HAB 'habitual'
						INTS 'intensive'
						DISTR 'distributed'
						ITCOM 'iter. to comp.'
						PLS 'plural source'
						PLF 'plural figure'
						ITER 'iterative'

SUFFIX POSITION 1	+	SUFFIX POSITION 2
		DIRECTIONALS
-b- 'intensive change'		-mlu- 'circulative'
-š- 'forceful contact'		-qla- 'downward'
-p̓- 'with force'		-qlo- ~ -ql- 'upward'
-t- 'iterative'		
-y- 'plural figure'		

SUFFIX POSITION 3	+	SUFFIX POSITION 4
$-m_g-$ 'down towards a surface'		$-m_i-$ 'iterative'
$-q_c-$ 'causative'		-n- 'figure separation'
$-q_p-$ 'non-singular'		
$-q_x-$ 'to away from'		

SUFFIX POSITION 5	+	SUFFIX POSITION 6
-mk̓u- 'reciprocal'		-k_i- 'inceptive'
-w- 'plural action'		-k_p- 'plural figure, source'
		-k_s- 'semelfactive'

SUFFIX POSITION 7	+	SUFFIX POSITION 8
-m_p- 'plural source'		-$c̓_r$- 'reflexive'
-$c̓_x$- 'to away'		-k_p- 'plural figure, source'

SUFFIX POSITION 9	+	SUFFIX POSITION 10
-l- 'durative'		-$c̓_p$- 'plural action'
		-q_c- 'causative'
		-q_p- 'non-singular'
		-k_i- 'inceptive'

SUFFIX POSITION 11	+	SUFFIX POSITION 12
-x̣ot- 'negative'		-tta- 'dual'

SUFFIX POSITION 13 MODE	+
-d- 'potential'	
-dey- 'about to'	
-mla?m- 'almost'	

SUFFIX POSITION 14

MODE	ASPECT
-a 'imperative'	-kle 'habitual'
-da 'future conditional'	-s 'negative imperfective'
-dowa 'hortative'	-t 'positive imperfective'
-hine 'imperf. optative'	-ya 'perfective'
-ƙli 'inabilitive'	
-wa 'impersonal agent'	

DEVERBALIZERS	CONJOINING ELEMENTS
-baq 'past passive part.'	-btonwa 'after'
-m 'instr. or place nom.'	-day 'simultaneous'
-n 'absolutive'	-fed 'conditional'
	-fla 'sequential'
	-qat 'when'
	-yukin 'before-switch reference'

POSITION 15
ENCLITICS

CONJOINING ELEMENT	INTERROGATIVES
-miţ 'identical subj.'	-ʔe 'interrogative'
	-ʔha 'yes-no interrogative'
	-we 'locative interrogative'

EVIDENTIALS	MODE
-do 'quotative'	-y 'perfective optative'
-ƙo 'introspective'	
-ya 'visual'	

Chapter Six. Directional Prefixes

Most of the directional affixes are prefixed to the verb stem. The few directional suffixes are treated in Chapter Ten.

6.1. bay- 'to the outside of an enclosed area'

Examples:

/bay+a+q_x+t/ → báyaqat '1 goes outside'

/bay+c̓e+q_x+t/ → báyc̓èqat '1 takes it out of the house'

/bay+cnu+q_x+t/ → báycnùqat 'preach'

/bay+do+q_x+t/ → báydòqat 'stick your head out through a window'

/bay+qƛu+l+t/ → báyqƛùlit 'spit something out'

/bay+k+ƛ̓a+q_p+n+$c̓_p$+t/ → báykƛ̓àqanc̓it 'he chased them out of the corral'

6.2. cal- 'to home'

This is made up of the stem ca 'house' and the object suffix -il.

Examples:

/cal+ʔye+q_p+dowa/ → cálʔyèqdowa 'let's go home'

/cal+o+t/ → cálot 'go home!'

6.3. dul- 'to across a body of water'

Examples:

/dul+fli+t/ → dúlflìt 'move residence to across the river'

/dul+xka+t/ → dúlxkàt 'they paddled across the river'

6.4. duy- 'through an area, around within an area, along the perimeter'

Examples:

/duy+ci+ya/ → dúycìya 'he walked through, carrying'

/duy+ʔhe+t/ → dúyʔhèt 'turn the car around; carry something across the hall'

/duy+ʔhe+c̓$_r$+t/ → dúyʔhèc̓it 'l receives a non-long object'

/duy+da+t/ → dúydàt 'road runs along the perimeter of the lake'

/duy+kɬ̓a+t/ → dúykɬ̓àt 'ladle or dip out soup, water'

/duy+q̓lo+q$_c$+t/ → dúyq̓lòqat 'he tipped it over'

/duy+sce+t/ → dúyscèt 'stand in a circle'

/duy+di+t/ → dúydìt 'float by on the water, glide by in the air'

/duy+ɬla+t/ → dúyɬlàt 'turn over(in prone position); turn around(in sitting position)'

/duy+xdi+DISTR+t/ → dúyxdìxdìt 'drag something around inside an area(like in the sweathouse)'

6.5. kuh- 'emerge out of an enclosed space'

Examples:

/kuh+ʔhe+t/ ⟶ kúʔhèt 'bring a non-long object in from the outside or from another room'

/kuh+ca+t/ ⟶ kúcàt '(the sun)rises'

/kuh+c̀i+c̀$_x$+t/ ⟶ kúc̀ìc̀it 'take something out of an enclosure'

/kuh+ne+t/ ⟶ kúnèt 'trees are growing'

/kuh+o+t/ ⟶ kúhot 'come out a hole, out of hiding'

/kuh+na+t/ ⟶ kúnàt 'smoke comes out of the hole in the top of the sweathouse'

/kuh+kdo+c̀$_x$+t/ ⟶ kúkdòc̀it 'pull a rope out of a box, a handkerchief out of your pocket'

/kuh+mdi+t/ ⟶ kúmdìt 'shut the door; put a lid on a jar'

/kuh+mli+t/ ⟶ kúmlìt 'someone pushes something over to your side of the room; take something out of the room'

/kuh+sce+t/ ⟶ kúscèt 'a squirrel peeps up out of a hole; a drill comes through a board'

6.6. lil- 'into an enclosure'

Examples:

/lil+k+ƛ̀a+n+c̀$_p$+t/ ⟶ lílkƛ̀àǹc̀it 'he chased the cattle into the corral'

/lil+bde+t/ ⟶ lílbdèt 'put a non-long object into a container'

/lil+bo+t/ → lílbòt 'he crawled into a tunnel'

/lil+ca+t/ → lílcàt '(the sun)sets'

/lil+do+t/ → líldòt 'put your hand into a hole, into your pocket'

/lil+mli+q_p+l+t/ → lílmlìqlit 'insert one non-long object each into many holes'

/lil+mo+t/ → lílmòt 'tunnel goes through'

/lil+ţle+t/ → lílţlèt 'fall into a creek'

6.7. ma- 'down to the ground; to a surface'

The difference in meaning between this and maţ- is not known.

Examples:

/ma+ni+t/ → mánit 'a tree full of apples falls down'

/lamesa ma+di+t/ → làmesa mádit 'set the table'

6.8. mal- 'across water; from water onto land'

This prefix is made up of the stem ma- 'land' plus the object suffix -il.

Examples:

/mal+ʔše+t/ → málʔšèt 'sit down on the ground after coming out of the water'

/mal+ca+q_c+t/ → málcàqat 'it was washed ashore'

/mal+m+sa+t/ → málmsàt 'he brought something in a boat'

/mal+ni+t/ ⟶ málnìt 'throw an object out of the water onto the land; to fire someone from a job'

/mal+xka+t/ ⟶ málxkàt 'he came across the water and landed on shore'

/mal+cki+t/ ⟶ máyckìt 'go from water onto land'

6.9. maţ- 'down to a surface, down to the ground'

Examples:

/maţ+m+ma+t/ ⟶ máţmmàt 'he lies down'

/maţ+k+ma+t/ ⟶ máţkmàt 'he sat down'

/maţ+sca+t/ ⟶ máţscàt 'he was sitting'

/maţ+ne+mk̓u+l+t/ ⟶ máţnèmk̓olit 'they wrestled(down to the ground)'

6.10. mo- 'cease forward motion, stop, come to rest'

Examples:

/mo+di+t/ ⟶ módit 'come to a stop on the water'

/mo+kto+t/ ⟶ móktòt 'walk along and stop'

/mo+kto+k_s+t/ ⟶ móktòkit 'he stood up; a horse rears'

/mo+ne+t/ ⟶ mónet 'lean something against something'

/mo+š+ne+t/ ⟶ móšnèt 'put a belt on someone'

6.11. moy- 'up off a surface, up from the ground'

Examples:

/moy+ʔhe+b+k_s+t/ ⟶ móyʔhèbkit '1 picks up a non-long object'

/moy+ca+b+k_s+t/ —> móycàbkit 'a non-long object(bird, helicopter)rises off the ground'

/moy+ca+b+k_s+t/ —> móycàbkit 'a long object(bird, airplane)rises off the ground'

/moy+di+t/ —> móydìt 'stuck in the mud'(this seems to mean 'suspended upward in a fluid')

6.12. til- 'thither, away from speaker'

Examples:

/til+ci+ya/ —> tílcìya 'he carried it away'

/til+o+t/ —> tílot 'he left'

/til+ʔbi+t/ —> tílʔbìt 'begin something'

/til+ʔhe+n+c_x+t/ —> tílʔhèncit 'chase away, drive off'

/til+bdi+t/ —> tílbdìt 'throw something away'

/til+ca+q_c+t/ —> tílcàqat 'mail something'

/til+fli+t/ —> tílflìt 'move, change residence'

/til+mdi+t/ —> tílmdìt 'open a door'

/til+ne+t/ —> tílnèt 'overtake and pass; throw away, leave behind'

6.13. χol- 'hither, towards speaker'

Examples:

/χol+o+t/ —> χólot 'he came'

/χol+yhe+mku+t/ —> χólyhèmkut 'they met each other'

/χol+bo+t/ —> χólbòt 'an animal or person walks up to you'

6.14. x̣qol- 'outward, to the outside'

Examples:

/x̣qol+ne+t/ —> x̣qólnèt 'sing; throw something from the side into the center'

/x̣qol+xdi+ITER+t/ —> x̣qólxdìxdìt 'drag something from the inside to the outside of(the sweathouse)'

/x̣qol+o+t/ —> x̣qólot 'creek running, water running after a storm'

/x̣qol+ʔhe+c̓$_x$+t/ —> x̣qólʔhèc̓it '1 or 2 take a non-long object out(from a cupboard, etc.)'

/x̣qol+bu+k$_s$+t/ —> x̣qólbùkit 'a boy or girl grows up'

/x̣qol+ca+k$_s$+c̓$_x$+t/ —> x̣qólcàkc̓it 'spring(season)'

/x̣qol+di+t/ —> x̣qóldìt 'it floated out from shore'

6.15. x̣uy- 'up to a high position'

/x̣uy+ma+t/ —> x̣úymàt 'place a long object up high(like on a high shelf)'

/x̣uy+k+ma+q$_c$+t/ —> x̣úykmàqat 'place a non-long object up high'

/x̣uy+x̣qo+m$_p$+q$_c$+t/ —> x̣úyx̣qòŋqat 'place several objects up high'

6.16. yoh- 'downstream, downhill, down along a surface'

Examples:

/yoh+ci+ya/ —> yóciya 'walk down carrying'

/yoh+fli+t/ —> yóflìt 'move downstream'

/bda yoh+bda+t/ —> bdà yóbdàt 'the creek runs downward'

/yoh+bo+t/ —> yóbot 'he crawled downhill'

/ʔ+su+n yoh+cya+t/ —> ʔsún yóčyàt 'the mark runs downward'

/dawa yoh+da+t/ —> dáwa yódat 'the road runs downhill'

/yoh+di+t/ —> yódit 'things float downstream'

/yoh+o+t/ —> yóhot 'he went downhill'

/yoh+kɬa+ITER+t/ —> yókɬàkɬàt 'drag something downhill'

/yoh+ɬla+t/ —> yóɬlàt 'slide, roll downhill'

6.17. yol- 'to away from something'

Examples:

/yol+bi+t/ —> yólbìt 'something is left, remains; leave something behind'

/yol+k_s+t wa+q_x+t/ —> yólkit wàqat 'he walked away from it'

6.18. yuy- 'back to(?)(meaning uncertain)

Examples:

/yuy+nu+k_s+c'_r+t/ —> yúynùk'it 'answer(nu-'speak')'

/yuy+xbe+k_s+c'_r/ —> yúyxbèki'c 'crutch, cane'

Chapter Seven. Instrumental Prefixes

7.1. Introduction

The instrumental prefix system of Southeastern Pomo appears to be considerably more limited than those of the other Pomo languages, both in productivity and in the number of occurring prefixes. This is largely the result of a pre-Southeastern Pomo phonological rule which deleted an unstressed vowel which preceded the stressed root vowel.[1] All of the instrumental prefixes were thereby reduced in shape from CV- to C-, causing extreme homophony. This seems to have resulted in reduced analyzability of the prefixes, their meanings only sporadically isolable from those of the roots.

For the purposes of this grammar, then, the resultant CCV and CCVC stem will be considered single morphemes, except in cases where a prefix is clearly identifiable, and can be combined with several different roots. The question of the synchronic reality of these prefixes in Southeastern Pomo will thus remain open for the present.

For comparative purposes, this section will present prefixes which are clear synchronically, as well as those which may be isolable only on a comparative basis. The cognate forms in Kashaya and Eastern Pomo will be provided for ease of comparison.[2]

7.2. Instrumental Prefixes

7.2.1. ʔ- 'with the hand'

This prefix corresponds to Eastern Pomo /da·-/ and Kashaya /da-/. It is ʔ- rather than d- because of a pre-Southeastern Pomo phonological rule

$$d \rightarrow ʔ \;/\; \_\_\; C$$

which resulted in the Southeastern Pomo sequence structure condition that d may not be followed by a consonant.

Examples:

/ʔ+boʔ+ k_s+t/ → ʔbóʔkit 'pull a plant up out of the ground'

/ʔ+dut̓+l+t/ → ʔdúṭlit 'touch, nudge with the hand'

/ʔ+ke+t/ → ʔkét 'hold or grab something'

/ʔ+liw+k_s+t/ → ʔlíwkit 'gesture with the hand; wave'

/ʔ+sat+t/ → ʔsátit 'feel something with the hands'

/ʔ+ta+n/ → ʔtán 'a hand'

/ʔ+te+š+k_s+t/ → ʔtéškit 'pat something with the hands'

7.2.2. ʔ- 'action by natural forces, by gravity'

This prefix corresponds to Eastern /di·-/ and Kashaya /di-/.

Examples:

/ʔ+beṭ+t/ → ʔəbéṭit 'destroy, run out of'

/ʔ+qay+t/ → ʔəqáyit 'a boat rocks; something turns over'

/ʔ+ṫat+k_s+t/ → ʔəṫátkit 'crack(an egg)'

/ʔ+te+š+k_s+t/ → ʔətéškit 'a bear jumps a man and brings him down'

/ʔ+ṫut+k_s+t/ → ʔṫútkit 'get a man down, wrestling'

7.2.3. ʔ- 'with one or more fingers or claws'

This is cognate with Eastern /du·-/ and Kashaya /dŭ-/.

Examples:

/ʔ+ċin+t/ → ʔċínit 'pinch someone'

/ʔ+lot+t/ → ʔlótit 'touch with the finger'

/ʔ+x̣aṭ+k_s+t/ → ʔəx̣áṭkit 'scratch with fingers, claws'

7.2.4. b- 'with a protrusion; with the mouth, tongue, beak; talking, eating'

This is cognate with Eastern /ba·-/ and Kashaya /ba-/.

Examples:

/b+ḳaṭ+t/ → bḳáṭit 'say something wrong; lie' (compare with ʔḳáṭit 'do something wrong')

/b+qoy+t/ → bqóyit 'to chop something into two pieces'

/b+coḳ+l+t/ → bcóḳlit 'fish nibbles, pulls on line'

/b+ḳo+ITER+k_s+t/ → bḳóbḳòkit 'bird pecks'

/b+lat+k_s+t/ → blátkit 'he's licking it'

/b+lit+k_s+q_c+t/ → blítkiqat 'stick out the tongue'

/b+lo+HAB+l+t/ → blóblòlit 'he mumbles'

/b+ţok'+t/ → bţók'it 'woodpecker pecks'

/b+xu·tu+k_s+c'_r+t/ → buxú·tuk'cit 'pucker up the mouth'

/b+yi+q_c+t/ → byíwat 'advise, lecture, preach'

7.2.5. b- 'handling a number of objects; gathering; by sewing'

This corresponds to Eastern /bi·-/ and Kashaya /bi-/.

Examples:

/b+ʔi+l+t/ → bʔélit 'gather food'

/b+ho+w+l+t/ → bhówlit 'he's stringing beads'

/b+di+q_c+t/ → bdíqat 'hand someone a bunch of arrows'

/b+šuţ+t/ → bšúţit 'she's sewing'

7.2.6. c- 'with the front end, by flowing water'

This is cognate with Kashaya /cŭ-/ and may be related to Eastern /ku·-/.

Examples:

/c+do+t/ → cdót 'see'

/c+ki+t/ → ckít 'bird alights; car, train stops'

/c+lot+t/ → clótit 'scrape something off; paint'

/c+wi+t+ITER+t/ ⟶ cwítcwìtit 'bow a violin'

/c+wol+ITER+k_s+t/ ⟶ cwólcwòlkit 'he stirred it'

/c+xuṭ+t/ ⟶ cxuṭit 'he sipped it'

/c+xol+k_s+t/ ⟶ cxólkit 'it's leaking'

7.2.7. c- 'with a massive object, with a knife'

This corresponds to Kashaya /ca-/ and possibly to Eastern /ka·-/.

Examples:

/c+yeṭ+q_c+t/ ⟶ čiyétqat 'to iron clothes'

/c+qa+t/ ⟶ cqát 'he put it down'

/c+x̣aw+q_c+t/ ⟶ cx̣áwqat 'he cut it down with a swinging motion'

/c+xaṭ+k_s+t/ ⟶ cxáṭkit 'strip a bunch of hops off a stem in one motion'

7.2.8. c̓- 'momentaneous, intensive action, projecting from a surface'

This is cognate with Eastern /c̓i-/.

Examples:

/c̓+daṭ+k_s+t/ ⟶ cdáṭkit 'splatter; he spit and his spit splattered'

/c̓+le+t+t/ ⟶ c̓létit 'it's dripping'

/ċ+mu+INTS+k_s+t/ → ċmúċmùkit 'he smiled'

/ċ+te+q_c+k_s+t/ → ċtéxkit 'he sneezed'

/ċ+xuṭuk̇/ → oxúṭuk̇ 'wart'

7.2.9. f- 'with the end of a long object'

This is cognate with Eastern /p^ha·-/ and Kashaya /p^ha-/.

Examples:

/fa+dak̇+t/ → fádak̇it 'to dress a deer'

This verb stem is unusual in its preservation of the prefix vowel, if the above segmentation is correct. The stress apparently moved back onto the prefix before that vowel was deleted.

/f+ṭik̇+t/ → fṭík̇it 'whip, beat someone'

/f+ṫam+q_c+t/ → fṫámqat 'he lit the lamp'

7.2.10. f- 'with the side of a long object; piercing'

This is cognate with Eastern /p^hi·-/ and Kashaya /p^hi-/.

Examples:

/f+luṫ+k_s+t/ → flúṫkit 'he dented it'

/f+q̇a+l+t/ → fq̇álit 'knock nuts off a tree'

7.2.11. k- 'poking, piercing, pounding, squeezing, mashing'

This probably corresponds to both /ka·-/ and /ku·-/ in Eastern.

Examples:

/k+duṭ+k_s+t/ → kdúṭkit 'poke, jab with finger'

/k+ca+t/ → kcát 'to kick'

/k+cu+š+k_s+t/ → kcúškit 'he poked it with a stick'

/k+ċoḳ+k_s+t/ → kċó?kit 'hit someone with your fist'

/k+luc+k_s+t/ → klúckit 'he rolled a cigarette'

/k+luṫ+DISTR+k_s+t/ → klúṫklùṫkit 'it's dented up all over'

/k+nil+t/ → knílit 'pound, grind'

/k+šu+ITER+t/ → kšúkšùt 'he poked around with a stick'

/k+ṭal+k_s+t/ → kṭálkit 'slap someone'

/k+to+k_s+t/ → któkit 'he took a step'

/k+ṭuḳ+k_s+t/ → kṭú?kit 'he punched a hole in it, pierced it'

/k+ṭaṫ+t/ → kṭátit 'squash, step on, mash'

/k+ṭeṫ+k_s+t/ → kṭétkit 'run over with a car, mash'

/k+ti+t/ → ktít 'stab, spear, impale, poke with finger'

/k+ti+k_i+t/ → ktíkit 'bump into, hit, run into'

/k+ti+m_i+t/ → ktímat 'beat a drum'

7.2.12. m- 'with a projection at the end of a long object; with the fingers, with the butt of the hand, with the foot'

This is cognate with Eastern /ma·-/ and Kashaya /ma-/.

Examples:

/m+dut+k_s+t/ → mdútkit 'squeeze with the fingers'

/m+ċal+k_s+t/ → mċálkit 'squeeze in arms, hands; wring out clothese'

/m+li+k_s+t/ → mlíkit 'throw many objects, a bunch of sticks'

/m+na+k_s+t/ → mnákit 'to pay'

/m+ṭak+k_s+t/ → mṭá?kit 'press it down with the hand'

/m+ṭek+k_s+t/ → mṭé?kit 'step on, mash, smash with the foot; depress the gas pedal'

/m+te+š+k_s+t/ → mtéškit 'pat, slap with both hands'

/m+x̣at+k_s+t/ → mx̣átkit 'strip a bunch of hops off a stem in one motion'

7.2.13. m- 'with internal energy; with heat, exploding, burning; with the emotions'

This is cognate with Eastern /mu·-/ and Kashaya /mŭ-/.

Examples:

/m+bol+k_s+t/ ⟶ mbólkit 'pop, explode, blow up; tire blows, bacon pops, balloon pops'

/m+ho+l+t/ ⟶ mhólit 'wood turns to charcoals'

/m+lu+t/ ⟶ mlút 'bake, roast'

/m+ṫa+t/ ⟶ mṫát 'be cooked, sunburned'

/m+ṫe+k_s+t/ ⟶ mṫékit 'be hot, warm; have a fever'

/m+ċay+m_i+$ċ_r$+t/ ⟶ mċáymaċit 'to hate'

/m+ċo+q_c+$ċ_r$+t/ ⟶ mċóqċit 'be ashamed'

/m+feṭ/ ⟶ mféṭ 'skunk'

/m+doyo+k_s+t/ ⟶ mdóyokit 'sour'

/m+qay+t/ ⟶ mqáyit 'sweet'

/m+xu·tu+k_s+t/ ⟶ mxú·tukit 'shrivel up; be wrinkled up'

/m+xe+$ċ_r$+t/ ⟶ mxéċit 'it has an odor(not necessarily bad)'

7.2.14. m- 'with the projected end of an object'

This is cognate with Eastern /mi·-/ and Kashaya /mi-/.

Examples:

/m+pu+k_s+t/ ⟶ mpúkit 'to whistle, blow a whistle'

/m+di+l+t/ ⟶ mdélit 'to fish with a dip net'

/m+do+q_c+t/ ⟶ mdóqat 'to kill'

/m+qo+q_c+t/ → mqóqat 'to holler, shout'

/m+ṭo+q_c+k_s+t/ → mṭóqkit 'smack the lips' (This form exceptionally does not undergo Spirantization. It may also be pronounced mṭóxkit.)

7.2.15. q- 'with a biting, scratching, tearing, mashing action'

This is cognate with Eastern /qa·-/ and Kashaya /qa-/.

Examples:

/q+beṭ+t/ → qbéṭit 'to eat all the food up; to scratch'

/q+ce+k_s+t/ → qcékit 'to eat along with, in addition to'

/q+ne+t/ → qnét 'to bite'

/q+ne+c_p+t/ → qnécit 'eat the same food day after day'

/q+se+q_c+ya/ → qséqya 'canned food'

/q+ṭay+l+t/ → qṭáylit 'to tell something(archaic)'

/q+šul+l+t/ → qšúllit 'peel buckeye, corn'

/q+ṭa+m_i+t/ → qṭámat 'rusty, mildewed'

/q+ṭat+ITER+k_s+t/ → qṭátqṭàtkit 'mash'

7.2.16. s- 'cutting, slicing, shearing'

This is probably cognate with Eastern /sa·-/.

Examples:

/s+qoy+t/ → sqóyit 'cut with scissors; saw off'

/s+da+t/ → sdát 'peel(fruit or vegetable)'

/s+da+t+k_s+t/ → sdátkit 'slice bread'

/s+ḳoṭ+l+t/ → sḳóṭlit 'he shovelled all day'

/s+ṗa+m_i+t/ → sṗámat 'mouse gnaws'

/s+ḳa+b+k_s+t/ → sḳábkit 'cut with knife, tear, slash, rip'

/s+q̇ol+t/ → sq̇ólit 'cut hair, feathers with shears'

7.2.17. s- 'with water'

This is cognate with Eastern /si·-/ and Kashaya /si-/.

Examples:

/s+coṭ+t/ → scóṭit 'it's melting'

/s+wo+ITER+k_s+$c̓_p$+t/ → swóswòkc̓it 'gargle'

/s+wo+t+k_s+q_c+t/ → swótkiqat 'dissolve'

/s+di+q_c+t/ → sdíqat 'swallow'

7.2.18. š- 'with a long, often flexible object'

This is cognate with Eastern /k^hi·-/ and Kashaya /c^hi-/.

Examples:

/š+bu+t/ → šbút 'weave a basket'

/š+da+t/ → šdát 'make mush'

/š+dok'+k_s+t/ → šdó?kit 'make a dent; a gully or depression in the ground'

/š+lu+l+c'_r+t/ → šlóyc'it 'snake sheds its skin' (This form shows that phonological rule 12. Vowel Lowering must precede phonological rule 20. Liquid Palatalization.)

/š+ne+t/ → šnét 'put a belt or headband on someone'

/š+ţ'a+p'+q_c+t/ → šţ'áp'qat 'snap your fingers'

7.2.19. š- 'spreading out, stretching'

This is probably cognate with two prefixes in Eastern Pomo, /k^hu·-/ and /$ţ^h$i·-/.

Examples:

/š+?o+t/ → š?ót 'leach acorns'

/š+ki+t/ → škít 'catch in a trap, in a net'

/š+mo/ → šmó 'foam'

/š+ţay+t/ → štáyit 'bleed someone; cut with a flint'

/š+wu+k_s+t/ → šwúkit 'melt, thaw out'

7.2.20. x̣- 'break, undo'

This is probably cognate with Kashaya /ha-/, and maybe with Kashaya /hi-/.

Examples:

/x̣+lo+k_s+t/ → x̣lókit 'unwind, tear down, erase'

/x̣+moṭ+t/ → x̣móṭit 'snore'

/x̣+qa+b+k$_s$+t/ → x̣qábkit 'break in a door'

/x̣+qoy+t/ → x̣qóyit 'fell a tree'

/da x̣+di+q$_c$+s/ → da x̣díqas 'he doesn't know'

Chapter 8. The Verb Root

8.1. Introduction

A syntactic analysis of a language should include as an integrated sub-part a presentation of the verb stem and affixal systems. The criterial categories which the particular language abstracts out of the experiential continuum should be given, and the system in which they are embedded should be characterized at the most abstract deep structure or generative semantic level. Finally, to validate the empirical reality of the deep analysis, there should be a set of transformations relating such a system to observed surface configurations.

This analysis of the Southeastern Pomo verb will fall short of this goal. What is being presented is a syntactic-semantic characterization of each affix, and an analysis of a small but significant sub-part of the verb root system, which I will term the motion-configurational system. This includes the verbs of motion, position, giving, carrying, throwing, and placing of objects.

An informal presentation of the prelexical structure of these roots will be given first.[3] Then the roots will be listed in sets which are suppletive for the number of the 'figure' or 'theme'.[4] Gruber defines 'theme' as the noun phrase in the sentence

which "may be in motion in a concrete or in an abstract sense, manifesting a change of position, possession, class membership, activity, etc."[5]

Each verb root will be defined first according to the prelexical components which I believe are involved, and then by various English translations supplied by the informants. Some examples of the use of these roots will be given in this chapter, and further examples will be found throughout the verb morphology.

8.2. Motion-configurational Prelexical Elements

In this section the prelexical elements which define this subset of the verb root system will be presented. They will be formalized into binary features for notational convenience only, but these features may be indicative of real categories in the language. The elements fall into seven categories:

1) Presence or absence of source of motion
2) Figure-source relationship
3) Shape of figure
4) Orientation of figure
5) Position of figure with respect to the medium
6) Motion of figure
7) Number of figure

8.2.1. Presence or Absence of Source of Motion

The set of verb roots can be bifurcated on the criterion of whether or not a 'source of motion'(in Gruber's sense)is specified. For the verbs treated in this section, those which indicate presence of source are transitive and those indicating absence are intransitive. This distinction will be formalized by the feature [±source present]. [+source present] verbs indicate carrying, placing, giving and throwing, and [-source present] verbs indicate stationary position or motion. [-source present] verbs can be changed to [+source present] by the addition of the suffix -q_c- 'causative'.

8.2.2. Figure-source Relationship

[+source present] verbs may be further distinguished by the spatial(and extended meanings)relationship between the figure and the source. The figure may be in contact with the source, out of contact and moving away from the source, or may be transferred from one source to another.

These distinctions will be represented by the features [±figure contact] and [±figure transfer]. [+figure contact] verbs indicate holding and carrying, [-figure contact] verbs indicate such things as throwing

and sending, and [+figure transfer] verbs indicate giving. In addition, a verb root marked [+figure contact] may be changed to [-figure contact] by the addition of the suffix -n- 'figure separation'.

8.2.3. Shape of Figure

Many of these roots specify the shape of the figure involved. The classification is basically between plural(or mass), and between long and non-long objects. In addition, the [+figure contact] or carrying verbs distinguish between animate and inanimate objects. With other verbs, animate objects are considered either long or non-long. The features used to indicate these distinctions are [±long], [±mass] and [±animate].

8.2.4. Orientation of Figure

If a figure is marked [+long], its orientation, whether horizontal(lying)or vertical(standing)may be indicated by the verb root. This will be specified by the feature [±vertical].

8.2.5. Position of Figure with Respect to the Medium

Basically, a two-way distinction is made as to the medium that the figure is positioned in relation to. It is either positioned on a surface or within a fluid.

The fluid may be air or water, a distinction made by some roots, but not by others(such as -di- which is 'suspended in a fluid', but xka- 'come to land from out of water'). It is probably the case that the distinction is not between types of fluid, but between the kinds of actions possible in the environment of air or water specifically. The distinction will be indicated by [±surface], [-surface] meaning positioning within a fluid. Plural or mass figures positioned on a surface may be specified to be distributed over the surface, indicated [±distributed]. Finally, at least one pair of roots distinguishes between the ground and other surfaces, so a feature [±ground] is necessary.

Some verb roots indicate transfer of a figure from one medium to another, such as from air to land, water to land, or land to water. A notation like [+surface] → [-surface] meaning 'from a surface into a fluid' will be used. At least one verb also indicates greater forcefulness in the transfer, so a feature [±force] will be used. Also, a feature [±from water] is necessary to distinguish water-to-land motion from air-to-land motion in a few instances.

8.2.6. Motion of Figure

Motion can be specified by a four-way distinction for the roots treated here: a figure is at rest, in translatory motion, in rotation around an axis, or passing from an in-motion state to an at-rest state. These will be indicated by the features [±motion], [±translatory], [±rotation, and[±end motion]. [-end motion] can be changed to [+end motion] by the addition of the suffix -b- 'intensive change in motional state'.

8.2.7. Number of Figure

The majority of motion-configurational roots are suppletive for singular, dual and plural/mass figure number. Some roots make only a two-way distinction, between singular/dual and plural figure.

Therefore, the feature notation for number of figure will be [±plural] and [±dual].

8.2.8. Internal Relationships of the Features

Although no theoretical claim is being made that the above features are an adequate representation of the semantics of these verb roots, in this section some statements of hierarchy and redundancy within this feature system will be given.

1. [+source present] $\longrightarrow$ $\begin{bmatrix} \pm\text{figure contact} \\ \pm\text{figure transfer} \end{bmatrix}$

2. [-mass] $\longrightarrow$ $\begin{bmatrix} \pm\text{long} \\ \pm\text{animate} \end{bmatrix}$

3. [+surface] $\longrightarrow$ [$\pm$ground]

4. [+motion] $\longrightarrow$ $\begin{bmatrix} \pm\text{translatory} \\ \pm\text{rotational} \\ \pm\text{end motion} \end{bmatrix}$

5. [-plural] $\longrightarrow$ [$\pm$dual]

6. $\begin{bmatrix} \pm\text{mass} \\ \pm\text{surface} \end{bmatrix}$ $\longrightarrow$ [$\pm$distributed]

7. [+long] $\longrightarrow$ [$\pm$vertical]

8. [+figure contact] $\longrightarrow$ [$\pm$animate]

9. [+plural] $\longrightarrow$ [+mass]

10. [+motion] $\longrightarrow$ [-distributed]

11. $\left\{ \begin{bmatrix} +\text{figure contact} \\ +\text{figure transfer} \end{bmatrix} \right.$ $\longrightarrow$ [+source present]

12. $\left\{ \begin{bmatrix} +\text{long} \\ +\text{animate} \end{bmatrix} \right.$ $\longrightarrow$ [-mass]

13. [+ground] ⟶ [+surface]

14. $\left\{\begin{matrix}[+\text{translatory}] \\ [+\text{rotational}]\end{matrix}\right\}$ ⟶ [+motion]

15. [+dual] ⟶ [-plural]

16. [+distributed] ⟶ $\left[\begin{matrix}+\text{mass} \\ +\text{surface}\end{matrix}\right]$

17. [+vertical] ⟶ [+long]

18. [+animate] ⟶ [+figure contact]

8.3. The Verb Roots

The motion-configurational verb roots will now be listed. It should be noted that the feature notation is not intended to fully characterize the semantics of the roots, but only to maintain some distinctness between them. It seems clear that if binary feature notation is to be used at all in semantics, the distinctness convention utilized in phonology cannot be maintained. Morphemes must be differentiable by the specification or lack of specification of a given feature, that is, a third value, which will be indicated [±Feature].

Singular, dual and plural/mass number will be indicated here and elsewhere in the grammar as 1, 2

and 3, rather than as [-plural, -dual], [-plural, +dual] and [+plural].

8.3.1. ca- 1
ko- 2
mha- 3

[-source present, +surface, ±translatory]

'motion over a surface; run, fly, flow'

Examples:

/ca+mlu+l+t/ → cámlolit '1 runs around a point, or within an area, or flies around in the sky'

/ko+mlu+l+t/ → kómlolit '2...'

/mha+mlu+l+t/ → mhámlolit '3...'

/ca+l+t/ → cálit '1 runs, flies; water flows slowly'

/ca+l+q_p+m_i+q_c+t/ → cálqmaqat 'they're playing ball'

8.3.2. wa- ~ -a- ~ -o- 1
yhe- 2
ʔye- 3

[-source present, +surface, +translatory]

'motion along a surface; walk, go'

The semantic difference between ca- and wa- is not adequately characterized by the features. The difference seems to be between 'moving along progressively'(ca-) and simply 'going'(wa-). The former seems to indicate

a more flowing kind of motion, the latter usually less so.

The allomorphy for the singular morpheme can be expressed by the following ordered readjustment rules:

1) wa → a / bay __

2) wa → o / dir. prefix __

3) wa → wa

Examples:

/wa+l+t/ → wálit '1 is walking'

/yhe+l+t/ → yhélit '2...'

/ʔye+l+t/ → ʔyélit '3...'

/wa+l+k_i+t/ → wálkit '1 started walking'

8.3.3. di- 1

li- 2

li+t- 3

[-source present
-surface
{-motion
[+motion
+translatory]}]

'moving or hovering while suspended in and being buoyed up by a fluid; float in water, glide in air, be stuck in mud'

The plural is formed from the dual plus the suffix -t- 'iterative'.

Examples:

/duy+di+t/ → dúydìt '1 floats by on water, glides by in the air'

/duy+li+t/ → dúylìt '2...'

/duy+li+t+t/ → dúylìtit '3...'

/di+m_g+t/ → dímat '1 hangs in the air or floats on the water(stationary)'

/li+m_g+t/ → límat '2...'

/li+t+PLF+t/ → lítlìtit '3...'

/di+b+k_s+t/ → díbkit '1 floats along and comes to a stop on the water'

8.3.4. bhe- 1,2
mya- 3

[-source present
-surface
+motion]

'motion through a fluid; swimming'

Examples:

/bhe+l+t/ → bhélit '1 swims'

/bhe+tta+t/ → bhéttat '2...'

/mya+t/ → myát '3...'

/bhe+mlu+l+t/ → bhémlolit '1 swims around'

8.3.5. q̀lo- 1,2,3

[-source present
+surface
+translatory
+rotational]

'rolling motion along a surface; wheel rolls'

Examples:

/ʼqlo+l/ ⟶ ʼqlól 'wheel'

/ʼqlo+ITER+k_s+t/ ⟶ ʼqlóʼqlòkit 'the wagon is rolling along'

8.3.6. bo- 1
bla- 2
mha- 3

[-source present
+surface
-vertical
+translatory]

'motion along a surface, long object horizontally; crawl, walk on all fours, snake moves'

Examples:

/bo+l+t/ ⟶ bólit '1(baby, snake)crawls, moves'

/bla+l+t/ ⟶ blálit '2...'

/mha+l+t/ ⟶ mhálit '3... ; mudhens swimming along on the surface of the water'

/bo+k_i+t/ ⟶ bókit 'baby starts crawling'

/bo+qlo+q_c+t/ ⟶ bóqloqat '1(dog, baby)crawls uphill; up to you'

/bla+qlo+q_c+t/ ⟶ bláqloqat '2...'

/mha+qlo+q_c+t/ ⟶ mháqloqat '3...'

8.3.7. qa- 1,2,3

[-source present
+translatory
[+surface] ⟶ [-surface]]

'motion into a fluid medium; dive into water, swim'

Examples:

/qa+k_s+t/ → qákit '1 dives in'

/qa+k_s+tta+t/ → qáktat '2...'

/qa+m_p+t/ → qámat '3...' or '1,2,3 swim'

8.3.8. sca- 1
mye- 2
blo- 3

[-source present
-long
+surface
-motion]

'non-long object rests on a surface; sit(the human body in a sitting position is [-long])'

Examples:

/maṭ+sca+t/ → máṭscàt 'he's sitting down'

/sca+t/ → scát 'he's sitting, staying; he's alive; it's sitting there'

/mye+m_g+t/ → myémat '2 are seated, sitting'

/blo+m_g+t/ → blómat '3...'

8.3.9. kto- 1
no- 2
blo- 3

[-source present
+long
+vertical
+surface
-motion]

'long object rests on a surface in a vertical position; stands'

Examples:

/kto+m_g+t/ → któmat '1 stands still; faces towards something'

/no+m_g+t/ → nómat '2 stand still'

/blo+m_g+t/ → blómat '3...'

/kto+k_i+t/ → któkit '1 steps on something'

/kto+m_g+tta+t/ → któmtat '2 face towards something'

8.3.10. mṭi- 1
bṭi- 2
χqo- 3

[-source present
+long
-vertical
+surface
-motion]

'long object rests on a surface in a horizontal position; lies'

Examples:

/mṭi+t/ → mṭít '1 person, log, animal is lying down'

/bṭi+t/ → bṭít '2...'

/mṭi+tta+t/ → mṭíttat '2...'

/χqo+m_p+t/ → χqómat '3...'

/χqo+m_p+q_p+a/ → χqómqa 'lie there!'

/χqo+m_g+q_c+a/ → χqóŋqa 'put it down there!'

The penultimate example is an exception to the

Nasal Backing rule. This may be due to pressure to keep the last two examples from being homophonous.

8.3.11. sce- 1,2,3

[-source present
+mass
+surface
-motion
+distributed]

'objects distributed on a surface'

Examples:

/x̣os sce+t/ → x̣òs scét 'people sitting or standing around in a circle'

/sce+n/ → scén 'rain'

/sce+n sce+k_p+t/ → scèn scékit 'it's raining'

8.3.12. ţla- 1
šţa- 2
x̣qo- 3

[-source present
+long
{+surface
[-surface] → [+surface]}
-vertical
+rotational
±translatory]

'long object turns on horizontal axis; turn over in bed; airplane takes off; person rolls onto the ground and lies there; someone falls; houses stand in a row(extended meaning?)'

Examples:

/ɬla+ya/ → ɬláya '1 fell(into the lake, from a boat)'

/ɬla+q_c+t/ → ɬláqat '1 fell down'

/šɬa+q_c+t/ → šɬáqat '2...'

/x̣qo+q_c+t/ → x̣qóqat '3...'

/myo ɬla+m_i+q_c+$\dot{c}_r$+t/ → myò ɬlámq̇cit 'feel sorrow, grief (myo 'heart)'

/ca ɬla+m_g+k_p+t/ → cà ɬlámkit 'row of house extends in a row'

/ɬla+l+t/ → ɬlálit '1 pencil moves around in a box; person crawls up to you'

/x̣qo+l+t/ → x̣qólit '3...'

/ɬla+k_s+t/ → ɬlákit 'person hits the ground, rolls, and lies'

8.3.13. ɬlo- 1,2,3

[-source present
+long
+surface
+vertical
+rotational
-translatory]

'long object turns on vertical axis; someone turns around'

Examples:

/ɬl+m_g+t/ → ɬlómat '1 turns around'

/ɬlo+m_g+q_c+t/ → ɬlómqat '1 turns 1 around'

8.3.14. kbi- 1,2
ẋqo+b- 3

[-source present
[-surface] → [+surface]
-from water
+end motion]

'come to rest down onto a surface; sit down, bird or plane lights down, lands'

Examples:

/kbi+k_s+t/ → kbíkit '1 sits, lights down'

/ẋqo+b+k_s+t/ → ẋqóbkit '3...'

8.3.15. cki- 1,2
ẋqo+b- 3

[-source present
+long
+vertical
+surface
+end motion]

'long object comes to rest on a surface; car, train, person comes to a stop'

Examples:

/cki+t/ → ckít '1 stops'

/ẋqo+b+k_p+t/ → ẋqóbkit '3 stop'

/cki+ITER+m_i+t/ → ckíckìmat '1 starts and stops, over and over'

8.3.16. maṭ+sca- 1
maṭ+kma- 2
maṭ+mya- 2
maṭ+blo- 3

[-source present
-long
+surface
+end motion]

'non-long object comes to rest on a surface; move to a sitting position, sit down'

Examples:

/maɬ+sca+t/ → máɬscàt '1 sits down'

/maɬ+kma+t/ → máɬkmàt '2...'

/maɬ+mya+m_g+t/ → máɬmyàmat '2...'

/maɬ+blo+m_g+t/ → máɬblòmat '3...'

8.3.17. xka- 1,2
?ye- 3

[-source present
[-surface] → [+surface]
+from water
+end motion]

'come to rest on land, from out of the water'

Examples:

/mal+xka+t/ → málxkàt '1 comes to shore'

/mal+xka+tta+t/ → málxkàttat '2...'

/mal+?ye+q_p+t/ → mál?yèqat '3...'

8.3.18. kna- 1,2
ɣqo+b- 3

[-source present
[-surface] → [+surface]
+force
+end motion]

'object comes to rest on a surface with a forceful or abrasive action; plop down on the bed and lie there, rub against wet paint, shut your eyes'

Examples:

/kna+t/ → knát '1 hit the bed and lay; 1 rubbed against wet paint'

/ẋqo+b+k_p+t/ → ẋqóbkit '3...'

/kna+k_s+t/ → knákit '1 closed his eyes'

8.3.19. ˈce- 1[+long]
ˈke- 2[+long]*
?du- ~ ?he-
1[-long]
?ta- 2[-long]
fi- 1,2[+animate]
ci- 3[+plural]
ci- 1,2,3 on back

[+source present
+figure contact
-figure transfer
+motion]

*ˈke- can also mean '3 carry 1-3 long objects each'.

'figure in motion with source; carry'

All carrying on the back is undifferentiated for shape and number.

The readjustment rule for '1[-long]' is

?du- → ?he- / dir. prefix __

?du- → ?du-

Examples:

/kuh+?he+t/ → kú?hèt '1 brings in a non-long object'

/?du+l+t/ → ?dúlit '1 carries 1 non-long object'

/kuh+ċe+t/ → kúċèt '1 brings in 1 long object'

/x̣ol+ci+ya/ → x̣ólcìya '3 bring in(peaches, water)

/x̣ol+ḱe+t/ → x̣ólḱèt '1 brings 2(loaves of bread)'

/fi+l+t/ → félit '1 carries a baby, a dog'

/duy+ʔhe+ya/ → dúyʔhèya '1 carried(a watermelon)through (the field)'

/ʔta+qli+k$_s$+ya/ → ʔtáqlikya '1 carried 2 non-long objects uphill'

/yo+fi+tta+ya/ → yófìttaya '1 carried 2(babies)downstream'

/mal+ċe+t/ → málcèt '1 brought it in from the lake'

8.3.20. bde- 1,2[-long]
ne- 1,2[+long]
mli- 3[+plural]
kle- 3[+distributed]
ʔla- iterative

[+source present
-figure contact
-figure transfer]

'object in motion away from source; throw, send'

Examples:

/bde+l+t/ → bdélit '1 throws something'

/bde+t/ → bdét '1 hit someone with a rock, ball'

/kle+l+t/ → klélit '1 threw a lot of rocks at many people'

/ne+t/ → nét '1 throws a stick'

/ne+k$_s$+t/ → nékit '1 threw a stick once'

/mli+k$_s$+t/ → mlíkit '1 threw many rocks, sticks'

8.3.21.

x̣o-	1[+long]	[+source present +figure contact +figure transfer]
f?o-	2[+long]	
?qa-	1[-long]	
?ta-	2[-long]	
ho-	3[+plural]	

'figure is transferred from one source to another; give'

Examples:

/x̣o+t/ → x̣ót '1 gives one long object'

/x̣os f?o+ya/ → x̣òs f?óya '1 or 2 gave 2 long objects'

/?qa+t/ → ?qát '1 gives 1 non-long object'

/x̣os ?ta+q_p+t/ → x̣òs ?táqat '1 or 2 give 2 non-long objects'

/ho+q_p+ya/ → hóqya '1, 2 or 3 gave many objects'

8.3.22.

kma-	1[-long]	[+source present +figure contact +surface -ground -motion]
ma-	1[+long]	
mya-	2	
x̣qo-	3	

'place object on a surface'

Examples:

/x̣uy+ma+t/ → x̣úymàt '1 placed 1 long object up high'

/x̣uy+kma+t/ → x̣úykmàt '1 placed a non-long object up high'

/x̣uy+x̣qo+m_g+q_p+t/ → x̣úyx̣qòŋqat '1 placed 3 objects up high'

/ma+q_c+t/ → máqat '1 put 1 long object on the table'

8.3.23. ko- 1,2
x̣qo- 3

[+source present
+figure contact
[-surface] → [+surface]]

'place an object down onto a surface'

Examples:

/maṭ+ko+t/ → máṭkòt '1 put something down'

/maṭ+x̣qo+m_p+q_p+t/ → mátx̣qòŋqat '3 put things down'

/ko+m_i+t/ → kómat 'serve food(put things down on the table repeatedly)'

8.3.24. cqa- 1
mya- 2
x̣qo- 3

[+source present
+figure contact
+ground]

'place an object on the ground'

Examples:

/cqa+t/ → cqát '1 put it on the ground'

/cqa+tta+t/ → cqáttat '1,2 put 2 on the ground'

/mya+m_g+q_p+t/ → myáŋqat '1 set 2 things down on the ground'

/maṭ+x̣qo+m_g+q_p+t/ → mátx̣qòŋqat '1 set many things down on the ground'

8.3.25. ʔeṭ-

+source present
+plural
+surface
-motion
+distributed

'place objects distributively on a surface'

Example:

/ʔeṭ+q_p+t/ → ʔéṭqat '1 set the table'

8.3.26. Neutralizations

It will be noticed that many of the distinctions are neutralized for some roots, especially when the figure is [+plural]. A list of these roots follows, with the number of each subsection of 8.3. in which it is presented.

mha- 1,6

mya- 4,16,22,24

blo- 8,9,16

x̣qo- 10,12,14,15,18,22,23,24

Chapter Nine. Reduplication

9.1. Reduplicative Morphemes

Several verb affixes are realized phonologically by reduplication of the verb stem. These are:

1. Habitual (HAB)
2. Intensive (INTS)
3. Distributed over a surface (DISTR)
4. Iterative (ITER)
5. Iterative to Completion (ITCOM)
6. Plural source of motion (PLS)
7. Plural figure (PLF)

While most verb stems occurring with reduplication also occur without, some, such as those for colors, do not.

Reduplicative morphemes will be represented in morphemic notation within the grammar in the same way as will morphemes with more independent phonological representations, except that they will be labelled with English abbreviations, rather than with underlying Pomo phonological elements.

Additionally, certain nouns show reduplication. These include derived verbs, as well as the semantic domains of small animals, plants, and birds. Nominal reduplication is not treated by rules, but is indicated

in the lexicon. Some reduplicative nouns follow.

qwáqwà cà 'kitchen, cookhouse' (qwa- 'eat')

qólqòl 'thunder'

wówò 'grandfather'

lmélmè 'pneumonia'

ƛúlù 'flute'

x̣áydàndàn 'one-stick basket'

c̓ílac̓ìla 'mink'

fqáclùlù 'lizard'

ṭún̓ṭùn 'mole'

c̓íinc̓ìn 'chipmunk'

hóšhòš 'porcupine'

lókoylòkoy 'pink flower pinole'

c̓íc̓ìkob 'berry'

cílikcìlik 'swallow'

c̓áyc̓ày 'bluejay'

c̓óṭc̓òṭ 'small flying creature(bird, fly)'

lálàq 'goose'

q̓áṭq̓àṭ 'crane'

wúqwùq 'loon'

x̣lébk̓òbk̓ò 'black and grey spotted woodpecker'

(x̣le 'tree' + b+k̓o- 'peck')

ʔáwʔàw 'crow'

9.2. Readjustment Rules

The following readjustment rules prepare verb forms which have reduplicative morphemes for the application of phonological rules.

$$\left\{\begin{array}{l}\text{HAB}\\ \text{INTS}\\ \text{DISTR}\\ \text{ITER}\\ \text{ITCOM}\\ \text{PLS}\\ \text{PLF}\end{array}\right\} \rightarrow \text{Reduplication}$$

Reduplication 1. Stem Reduplication

(Directional Prefix)+(Instrumental Prefix)+Root $\longrightarrow$

(DP)+(IP)+Root+(IP)+Root

$$((C_1)C_2V_1C_3)+(C_4)+C_5V_2(C_6) \longrightarrow$$

$$((C_1)C_2V_1C_3)+(<_1 C_{4\ 1}>)+C_5V_2(<_2 C_{6\ 2}>)+(<_1 C_{4\ 1}>)+C_5V_2(<_1 C_{6\ 2}>)$$

Reduplication 2. Directional Prefix + -o-

$$(C_1)C_2V_1C_3+o \rightarrow (C_1)C_2V_1C_3+o+C_3+o$$

Reduplication 3. Stem-final Consonant Loss (Minor Rule)

$$(C_1)+C_2V_1C_3 \rightarrow (< C_1 >)+C_2V_1C_3+(< C_1 >)+C_2V_1$$

Reduplication 4. Root+Suffix (Minor Rule)

Root+Suffix Root+Suffix+Root+Suffix

$C_1V_1+C_2 \longrightarrow C_1V_1+C_2+C_1V_1+C_2$

9.3. Examples of Reduplication

/ʔ+kol+ITCOM+k_s+t/ → ʔkólʔkòlkit 'a snake is curled up'

/ʔ+teċ+ITCOM+k_s+t/ → ʔtéċʔtèċkit 'fold something up'

/b+la+ITCOM+t+k_s+t/ → blátblàtkit 'lap it up'

/b+li+ITCOM+k_s+$ċ_r$+t/ → blíblìkċit 'wet the lips'

/bok+ITCOM+k_s+t/ → bókbòkkit 'boil over'

/k+luṫ+ITCOM+k_s+t/ → klúṫklùṫkit 'it's dented up all over'

/k+ʈuḳ+ITCOM+k_s+t/ → kʈúḳkʈùʔkit 'punch it full of holes'

/m+bol+ITCOM+k_s+t/ → mbólmbòlkit 'all the tires blew out'

/m+te+ITCOM+l+t/ → mtémtèlit 'pat down with the hands; pat dirt or wrinkles out of a bed'

/ḳe+ITCOM+k_s+c_r+t/ → ḳéḳekċit 'l clears his throat'

/ḳwo+ITCOM+t/ → ḳwóḳwòt 'cough something up'

/ʔ+loy+HAB+l+t/ → ʔlóylòlit ʔlólyòlit 'he skins an animal every day'

/b+ḳo+HAB+l+t/ → bḳóbḳòlit 'it pecks all the time'

/ẋol+o+HAB+m_1+kle/ → ẋólolomkle 'he used to come around'

/ʔ+le+INTS+t/ → ʔléʔlèt 'help someone'

/c̓ub+INTS+k_s+t/ → cúbcùbkit 'it's sharp-pointed'

/kci+INTS+k_s+t/ → kcíkcìkit 'the water is crystal-clear'

/stek̓+INTS+k_s+t/ → stékstèʔkit 'it's very sticky'

/xli+INTS+$c̓_r$+t/ → xlíxlìc̓it 'regret something'

/lki+DISTR+k_s+t/ → lkílkìkit 'it's shiney, it shines'

/lqo+DISTR+k_s+t/ → lqólqòkit 'it's black'

/cya+DISTR+k_s+n/ → čyáčyàkin 'blue-green'

/ṭ̓an+DISTR+n/ → ṭ́anṭ̀anin 'brown'

/ṭ̓o+DISTR+k_s+n/ → ṭ́oṭ̀okin 'white'

/ʔ+liw+ITER+l+t/ → ʔlíwʔlìwlit 'make gestures'

/ʔ+q̓o+ITER+l+t/ → ʔq̓óʔq̓òlit 'feel around for something in a container'

/ʔ+ṭeṭ+ITER+l+t/ → ʔṭéṭʔṭèṭlit 'walk around with your legs far apart; walk bowlegged'

/ʔ+x̣aṭ+ITER+k_s+t/ → ʔx̣áṭʔx̣àṭkit 'scour a spot; scratch with fingernails'

/b+x̣a+ITER+t/ → bx̣ábx̣àt 'he's whispering'

/ca+ITER+k_s+t/ → cákcàkit 'l flits around'

/cki+ITER+m_i+t/ → ckíckìmat 'stop and start, over and over'

/co+ITER+q_c+t/ → cóqcòqat 'l gallops, trots'

/cwi+ITER+t/ → cwícwìt 'play the violin'

/myo+ITER+k_s+t/ → myómyòkit 'breathe'

/q+ṭa+ITER+t+k_s+t/ → qṭátqṭàtkit 'mash'

/šu+ITER+l+t/ → šúšulit 'poke around with a stick'

/ṭṭu+ITER+k_s+t/ → ṭṭúṭṭùkit 'tremble'

/ci+PLS+b+m_p+t/ → cíbcìbmat '3 grab onto something'

/cwol+PLS+m_p+t/ → cwólcwòlmat '3 stir pots'

/cqe+PLS+t+q_c+t/ → cqétcqètqat '3 hang up many things'

/ʔ+bol+PLF+t/ → ʔbólʔbòlit 'pull 3 out'

/ʔ+na+PLF+t/ → ʔnáʔnàt '1 ties 3 up'

/ci+PLF+t+t/ → cítcìtit '3 hang, dangle'

/k̓e+PLF+t+t/ → k̓étk̓ètit '3 are sticking in the ground'

/lod+PLF+q_c+t/ → lódlòdqat 'knock many over'

/k̓ba+PLF+t/ → k̓bák̓bàt 'dust went into several people's eyes'

/ʔ+lo+PLS+t/ → ʔlóʔlòt '3 are untying'

/ʔ+lo+PLF+t/ → ʔlóʔlòt 'untie 3'

9.4. Vowel Reduplication

There is a small set of verb stems of the shape $(C)CV_1C(C)V_1$. This might possibly be a minimal form of reduplication, only the stem vowel being reduplicated. Since this is a totally non-productive phenomenon, these stems will merely be listed in the lexicon. The verbs in question are the following.

bošto- 'be glad'

bxu·tu- 'pucker up the mouth'

daq̇ya- 'scold'

kocolò- 'tickle someone' ($CV_1CV_1CV_1$ shape)

k̇ʔede- 'stiff, dry, calloused'

mdoyo- 'sour'

mq̇aba- 'sweet, strong, healthy, tough, hard'

mxu·tu- 'shrivel up, be wrinkled up'

nanta+c̈$_r$- 'think'

qmudu- 'thick, dense; of hair, hay, grass, etc.'

qṗiydi- 'have slit eyes'

qšulu- 'have cramps'

sk̇ada- 'cry, bawl, scream'

tmulu- 'clench the fist'

x̣qulbu- 'grow up, be adolescent, be tall and lean'

Chapter Ten. The Suffixes

In this chapter the verb suffix morphemes will be presented, along with semantic characterizations and examples of their use.

10.1. -b- 'intensive change in motional state'

This morpheme seems to indicate a rather vigorous inception or termination of an action or state of motion.

Examples:

/blo+b+k_s+t/ → blóbkit '1 sits down, bird alights'

/cdo+b+k_s+t/ → cdóbkit '1 wakes up and opens eyes'

/ci+b+k_s+t/ → cíbkit '1 grabs onto something while falling'

/di+b+k_s+t/ → díbkit '1 floats along and comes to a stop on the water'

/do+b+k_s+t/ → dóbkit 'place the hand down on something'

/ta+ITER+b+k_p+c_r+t/ → tátàbkicit 'children are playing'

/x̣a+b+k_s+t/ → x̣ábkit 'water stands in a puddle'

/da xko+b+k_s+s/ → da xkóbkis 'she didn't pay attention'

10.2. -p- 'with force(?)'

This suffix has been found on only two stems.

Examples:

/ko+ITER+p+k_s+q_c+t/ → kópkòpkiqat 'knock on a door''

/šta-p+q_c+t/ → štápqat 'snap your fingers'

10.3. -š- 'to contact with great force'

Examples:

/?+te+š+k_s+t/ → ?téškit 'a bear jumps on a man and brings him down'

/m+te+š+k_s+t/ → mtéškit 'pat or slap with both hands'

/mye+š+k_s+t/ → myéškit 'rub; push open with the hands'

/k+cu+š+k_s+t/ → kcúškit 'poke with a stick'

10.4. -t- 'iterative'

The meaning of this suffix is basically iterative, although it sometimes seems to indicate plurality of an associated noun phrase(figure, source, goal).

Examples:

/?+lu+t+t/ → ?lútit 'bail; wrap a box with paper'

/?+ša+t+m_p+t/ → ?šátmat '3 wear something'

/?+su+t+t/ → ?sútit 'scrape something off; whittle a stick, sharpen a pencil, plane a board'

/c+lo+t+t/ → clótit 'rub fingers on; many short scrapes on a surface'

/ć̓le+t+t/ → ć̓létit 'the faucet is dripping'

/ṭ̓a+t+k_s+t/ → ṭ̓átkit 'mash something'

/yoh+li+t+t/ → yólitit 'many objects float downstream'

10.5. -y- 'plural figure'

Examples:

/ʔ+lu+y+m_p+k_p+ć̓$_r$+t/ → ʔlúymakć̓it '3 wrap themselves up'

/ʔ+te+y+m_p+l+t/ → ʔtéymalit '1 covers many things'

/ʔ+te+y+m_p+k_p+t/ → ʔtéymakit '3 cover many things'

/ć̓a+y+m_p+k_s+t/ → ć̓áymakit '3 are hunting'

/daqalho+y+q_c+t/ → dáqalhoyqat '1 gathers things into a pile'

/kṭ̓a+y+m_p+k_p+t/ → kṭ̓áymakit '3 pouring something into containers'

/qṭ̓a+y+m_p+k_p+t/ → qṭ̓áymakit '3 are rusty; mildewed'

/ṭ̓a+y+k_s+t/ → ṭ̓áykit 'glass, ice cracks'

/blo+y+ć̓$_p$+t/ → blóyć̓it '3 sit around in a room'

10.6. -mlu- 'circulative'

This suffix indicates motion around a point or multidirectional movement within an area.

Examples:

/bhe+mlu+l+t/ → bhémlolit '1 swims around and around'

/ca+mlu+l+t/ → cámlolit '1 runs around something'

/do+mlu+t/ → dómlut 'move one's hand on something'

/ẋa+mlu+l+t/ → ẋámlolit 'the water runs around and around'

10.7. -qla- 'downward'

Examples:

/ca+qla+m_g+t/ → cáqlamat '1 flies down'

/do+qla+m_g+t/ → dóqlamat 'lower the hand, move the hand downward'

/kṭ́a+qla+m_g+t/ → kṭ́áqlamat '1 pours something down; it's raining hard'

10.8. -qlo- ~ -ql- 'upwards; uphill; up off the ground'

The alternation between the two forms is not clear, but is probably morphologically conditioned by the verb stem.

Examples:

/mha+ql+k_s+t/ → mháqlikit '3 fly up; 3 run uphill'

/ci+ql+k_s+t/ → cíqlikit 'walk uphill carrying'

/da+ql+k_s+t/ → dáqlikit 'a road runs uphill'

/do+ql+k_s+t/ → dóqlikit 'put one's hand up in the air'

/bla+qlo+q_c+t/ → bláqloqat '2 crawl uphill or up to you'

10.9. -m_g- 'towards or onto or on a surface; on the ground'

Examples:

/cdo+m_g+$\dot{c}_r$+t/ → cdómcit 'look at oneself in the mirror'

/kto+m_g+t/ → któmat '1 stands still'

/l$\dot{k}$u+m_g+t/ → l$\dot{k}$úmat 'it's dark(of weather)'

/$\dot{t}$lo+m_g+t/ → $\dot{t}$lómat '1 turns around/

/k$\dot{t}$a+m_g+t/ → k$\dot{t}$ámat 'baptize'

/ko+m_g+t/ → kómat 'serve food'

10.10. -q_c- 'causative'

Some examples will be given in pairs, to show the effect of the causative.

Examples:

/?+$\dot{t}$e?+k_s+t/ → ?$\dot{t}$é?kit 'it's heavy'

/?+$\dot{t}$e?+k_s+q_c+t/ → ?$\dot{t}$é?kiqat 'put something heavy on someone'

/?yo$\dot{t}$+q_p+m_p+q_c+t/ → ?yó$\dot{t}$qmaqat '3 refuse'

/bay+$\dot{c}$e+q_c+t/ → báy$\dot{c}$èqat 'take something out of the building'

/bay+cnu+q_c+t/ → báycnùqat 'he's preaching' (cnu 'word')

/bcil+n/ → bcílin 'long'

/bcil+k_s+q_c+t/ → bcílkiqat 'lengthen'

/ca+l+q_c+t/ → cálqat '1 rolls a ball, a hoop; drives a car'

/cdo+q_c+t/ → cdóqat '1 shows('causes to see')'

/ċdaƛ̓+k_s+t/ → ċdáƛ̓kit '1 splatters'

/ċdaƛ̓+k_s+q_c+t/ → ċdáƛ̓kiqat '1 spits something out, which splatters'

/ċub+ITCOM+q_c+t/ → ċúbċùbqat 'to sharpen'

/mʼa+t/ → mʼát 'it's cooked'

/mʼa+q_c+t/ → mʼáqat '1 cooks something, it's getting cooked, it's cooked'

/syi+m_g+t/ → syímat 'borrow something'

/syi+m_g+q_c+t/ → syíŋqat 'loan something'

/šaƛ̓+k_s+t/ → šáƛ̓kit 'water splashes'

/šaƛ̓+k_s+q_c+t/ → šáƛ̓kiqat 'throw water on'

10.11. -q_p- 'non-singular figure or source of motion'

Examples:

/ʔ+loy+q_p+t/ → ʔlóyqat '1 skins 2 or more animals'

/ʔ+teċ+q_p+t/ → ʔtéċqat '1 pleats a skirt(does many folds)'

/hulacu+q_p+m_p+t/ → húlacuqmat 'many are getting drunk'

/kšiṭ+q_p+m_p+q_c+kle/ → kšíṭqmaxkle 'they're always cheating people'

/kšul+q_p+t/ → kšúlqat 'they're all peeled'

/kti+q_p+m_p+t/ → ktíqmat 'they steal'

/kti+q_p+l+t/ → ktíqlit 'steal many things'

10.12. -q_x- 'motion to away from the speaker'

Many forms with this suffix seem to be ambiguously interpretable as containing -q_c-.

Examples:

/ci+q_x+t/ → cíqat 'carry a lot of things away from here'

(/ci+q_c+t/ → cíqat 'hand someone a bowl or glass full')

/ċe+q_x+t/ → ċéqat 'take something long away from here'

/ʔta+q_x+t/ → ʔtáqat 'take 2 away from here'

(/ʔta+q_c+t/ → ʔtáqat 'give 2 to someone')

10.13. -m_i- 'iterative'

Examples:

/ʔ+lu+m_i+t/ → ʔlúmat '1 wraps a long thing with cloth, wire, rope'

/ʔ+lu+m_i+m_p+t/ → ʔlúmamat '3 wrap a long thing'

/ʔqay+m_i+w+l+c'_r+t/ → ʔqáymawlic'it 'I makes faces'

/kti+m_i+t/ → ktímat 'beat a drum'

/myat+m_i+w+l+c'_r+t/ → myátmawlic'it 'wish, pray, think about something'

/s'pa+m_i+t/ → s'pámat 'mouse gnaws'

10.14. -n- 'figure separation'

As noted in 8.2.2., this suffix changes the meaning of verbs which indicate that the figure and source of motion are in contact to mean that they are spatially separated, but still causally connected in some way.

Examples:

/ʔhe+n+c'_x+t/ → ʔhénc'it 'I chases I'

/bay+ʔhe+q_x+n+c'_x+t/ → báyʔhèqanc'it 'I chases I out of'

/ʔta+n+c'_x+t/ → ʔánc'it 'I chases 2,3'

/do+q_c+n+hu+t/ → dóqanhut 'receive something; take something off somebody's hands' (This is the sole example of the morph -hu-.)

/bay+kda+n+l+t/ → báykdànlit 'I shoots, kills many'

/til+k+t'_a+n+c'_x+t/ → tílkt'anc'it 'I chases many away; many chase I away'

10.15. -mḱu- 'reciprocal'

The phonological treatment of -mḱu- is dealt with in section 4.3.10.

Examples:

/ʔki+mḱu+t/ → ʔkímḱut 'they got married'

/b+ḱo+w+c̀$_p$+mḱu+l+t/ → bḱówc̀imḱolit 'to gossip'

/c̀i+mḱu+l+t/ → c̀imḱolit 'a war, many fight each other'
(c̀i- 'do')

/f+di+q$_c$+mḱu+t/ → fdíqmuḱit 'recognize each other'

/k+c̀oḱ+mḱu+l+t/ → kc̀óḱmḱolit '2 hit each other'

/ʔanho+mḱu+l+t/ → ʔánhomḱolit 'they're arguing'

/x̣ox̣l+l+k$_s$+t til+yhe+mḱu+t/ → x̣òx̣lilkit tílyhèmḱut
'they went in opposite directions'

/mxex+mḱu+tta+t/ → mxéxmuḱtat 'they swapped something'

/tošna+mḱu+t/ → tóšnamḱut 'they embraced each other'

10.16. -w- 'plural action'

This suffix means that an action is performed a number of times, either simultaneously by different agents or sequentially by the same agent.

Examples:

/ʔ+ḱo+w+c̀$_p$+t/ → ʔḱówc̀it 'many feed the fire'

/b+ho+w+l+t/ → bhówlit 'l strings beads'

/b+ku+q_x+t/ → bkúqat '1 shoots, gigs, spears'

/b+ku+w+q_x+t/ → bkúwqat '1 thrashes standing grain'

/k+ša+PLF+w+q_p+t/ → kšáwkšàwqat 'break many'

/q+mu+w+l+t/ → qmúwlit 'he tastes them sequentially (like at a wine tasting)'

/q+mu+w+m_p+t/ → qmúwmat 'they're tasting it'

10.17. -k_i- 'inceptive'

Examples:

/χaq'+k_i+t/ → χá?kit 'he started crying'

/lme+ITER+t/ → lmélmèt 'have the chills'

/lme+ITER+k_i+t/ → lmélmèkit 'get the chills'

/myo+k_i+t/ → myókit 'wake up, become conscious'

/wa+l+k_i+t/ → wálkit '1 starts walking'

/χmoţ+k_i+ya/ → χmóţkiya '1 started to move'

10.18. -k_p- 'plural figure; plural source of motion'

Examples:

/f+di+k_p+t/ → fdíkit 'many know'

/q'a+k_p+t/ → q'ákit 'many men leave their wives'

/myel+k_p+t/ → myélkit 'many are watching, watching over'

/q+beṭ+k_p+m_p+t/ → qbéṭkimat 'many ate the food up'

/sq̓ol+k_p+l+t/ → sq̓ólkelit '1 cuts the hair of many'

/š+bu+k_p+t/ → šbúkit 'many weave'

10.19. -k_s- 'semelfactive'

This suffix appears to both characterize the overall shape of an action as being of relatively short duration, in contrast to -l- 'durative', as well as to indicate that an action is performed once, as opposed to an action performed habitually or an unspecified number of times.

Examples:

/xi+t/ → xít 'to name someone'

/xi+k_s+t/ → xíkit 'to say someone's name'

/ʔ+k̓aṭ+t/ → ʔk̓áṭit 'do things on the sly'

/ʔ+k̓aṭ+k_s+t/ → ʔk̓áṭkit 'do something on the sly once'

/ʔ+liw+k_s+t/ → ʔlíwkit 'wave once to someone'

/ʔ+lot+k_s+t/ → ʔlótkit 'touch something once'

/ʔ+q̓aṭ+k_s+t/ → ʔq̓áṭkit 'cut 1 open'

/ʔ+teċ+k_s+t/ → ʔtéċkit 'fold something once'

/ʔ+teċ+ITCOM+k_s+t/ → ʔtéċʔtèċkit 'fold something up'

/šṭa+p̓+k_s+q_c+t/ → šṭáp̓kiqat 'snap the fingers once'

10.20. $-m_p-$ 'plural source of motion'

This is still another of the many verb suffixes indicating pluralization of action and of associated noun phrases. As may be seen from the examples, the suffixes seem to work together, reinforcing each other and further delineating the nature of the pluralization involved. $-m_p-$ indicates plural source of motion more unambiguously than $-k_p-$ does.

Examples:

/ʔ+lo+t+m_p+t/ → ʔlótmat 'many touch things'

/ʔ+luc+m_p+t/ → ʔlúcmat 'many roll cigarettes'

/ʔ+lu+t+m_p+t/ → ʔlútmat 'many are bailing'

/ʔ+q̓o+y+m_p+t/ → ʔq̓óymat 'many are picking prunes'

/ʔ+su+t+m_p+t/ → ʔsútmat 'many are planing a board'

/ʔ+x̣us+m_p+c̓$_r$+t/ → ʔx̣úsmac̓it 'many are scratching themselves where they itch'

/b+ʔi+m_p+t/ → bʔímat 'many are gathering edibles'

/b+šu+t+m_p+tta+t/ → bšútmattat '2 are sewing'

/x̣mi+PLS+m_p+t/ → x̣mix̣mìmat 'many are humming'

10.21. -c̓$_x$- 'to away from a point'

This suffix means either 'to away from the source of motion' or 'to away from the goal', and is usually found with the appropriate directional prefixes and -n- 'figure separation'.

Examples:

/kuh+c̓i+c̓$_x$+t/ → kúc̓ic̓it 'pull a bucket out of a well'

/x̣qol+ʔhe+n+c̓$_x$+t/ → x̣qól ʔhènc̓it 'take a non-long object out from the cupboard'

/bay+ʔta+q$_p$+n+c̓$_x$+t/ → báyʔtàqanc̓it 'chase 2 out'

/til+mdi+t/ → tílmdìt 'open the door'

/til+mdi+c̓$_x$+t/ → tílmdìc̓it 'open the door from the inside'

10.22. -c̓$_r$- 'reflexive'

Examples:

/ʔ+kay+c̓$_r$+t/ → ʔkáyc̓it 'take your own hat off'

/ʔ+ke+c̓$_r$+t/ → ʔkéc̓it 'hold your breath'

/ʔ+lu+m$_i$+c̓$_r$+t/ → ʔlúmc̓it 'wrap something around oneself'

/ʔ+lu+t+m$_p$+c̓$_r$+t/ → ʔlútmac̓it 'they rolled their hair up into buns'

/ʔ+sel+k$_p$+c̓$_r$+a/ → ʔsélkic̓a 'wash yourselves!'

/ʔqo+c̓$_r$+t/ → ʔqóc̓it 'he's hiding'

/?+su+$\dot{c}_r$+t/ → ?sú$\dot{c}$it 'mark yourself; get your picture taken'

/kma+q_c+$\dot{c}_r$+t/ → kmáq$\dot{c}$it 'pick up a hitchhiker' ('cause a person to place himself in a sitting position')

/da f+di+q_c+$\dot{c}_r$+s/ → da fdíq$\dot{c}$is 'be unconscious' ('to not know oneself')

/k$\dot{t}$al+k_s+$\dot{c}_r$+t/ → k$\dot{t}$álki$\dot{c}$it 'clap once('slap oneself')'

/nanta+$\dot{c}_r$+t/ → nánta$\dot{c}$it 'think'

/se+n sey+k_s+$\dot{c}_r$+t/ → sèn séyki$\dot{c}$it 'be ashamed of oneself' (sey- 'not to like something')

10.23. -l- 'durative'

-l- serves as a contrastive element to -k_s- 'semelfactive'. Its basic meaning seems to be durative, but it can indicate iterative, habitual, plural figure or goal, and frequentative.

Examples:

/?+$\dot{k}$o+w+l+$\dot{c}_p$+t/ → ?$\dot{k}$ówli$\dot{c}$it 'he keeps the fire going'

/?+liw+ITER+l+t/ → ?líw?l$\grave{i}$wlit 'make gestures'

/?+qa+y+l+t/ → ?qáylit 'boat rocks many times'

/?+šon+l+t/ → ?šónlit 'he guesses all the time'

/?+wal+$\dot{c}_r$+l+t/ → ?wál$\dot{c}$elit '1 dodges, ducks repeatedly'

/?wi$\dot{c}$+l+t/ → ?wí$\dot{c}$lit 'he's always fighting with his wife'

/b+ḱo+w+l+t/ → bḱówlit 'tell something to a lot of people'

/do+l+ć$_p$+t/ → dóyćit 'many are moving their hands back and forth'

/li+l+ć$_p$+t/ → léyćit 'many are floating'

10.24. -ć$_p$- 'plural action'

This suffix has the same meaning as -w-.

Examples:

/loy+ć$_p$+t/ → lóyćit 'they're singing'

/q+ne+ć$_p$+t/ → qnéćit 'eat the same food day after day'

/b+x̣a+ć$_p$+t/ → bx̣áćit 'I whispers'

/q́o+w+ć$_p$+t/ → q́ówćit 'many people are doing something'

10.25. -x̣ot- 'negative(non-imperfective)'

This is the realization of negative(along with the preverbal element da)when the verb negated would not have -t 'positive imperfective' in the positive form.

Examples:

/da bde+x̣ot+a/ → da bdéx̣ota 'don't hit him!'

/da kti+k$_s$+q$_c$+x̣ot+a/ → da ktíx̣qax̣ota 'don't hit it!'

/da ḱhod+l+x̣ot+kle/ → da ḱhódlix̣otkle 'he never used to limp'

/da daq̓ya+x̣ot+ya/ → da dáq̓yax̣otya 'he didn't scold him'

10.26. -tta- 'dual'

This suffix can dualize the figure, goal, or source of motion, sometimes resulting in a form that is ambiguous out of context.

Examples:

/ʔ+liw+k_s+tta+a/ → ʔlíwkitta '2 wave once!'

/ʔx̣e+k_s+tta+t/ → ʔx̣éktat '2 fix or make something'

/ʔ+ša+m_p+q_p+tta+t/ → ʔšámqattat '1 wears 2 things or 2 wear 1 thing'

/b+k̓o+w+l+tta+t/ → bk̓ówlittat '2 tell something to many'

/hali+q_p+m_p+tta+t/ → háliqmattat '2 discuss, plan'

/k+cuš+k_s+tta+t/ → kcúškittat '2 poke with sticks'

/k+sol+k_s+tta+t/ → ksólkittat '1 or 2 break 2 long objects'

/k+ti+q_p+m_p+tta+t/ → ktíqmattat '2 stab people'

/kuh+mdi+tta+t/ → kúmdittat '2 shut doors'

10.27. -dey- 'about to'

This suffix indicates that the action is impending, but still unperformed.

Examples:

/ʔo+mal+ay x̣ol+ʔye+q_p+t ke bxe na+k_s+dey+qat/ →

ʔòmlay x̣ólʔyèqat ke bxè nákdeyqat 'He was about to drive the deer when they came.' ("they-came-and-deer-he was about to drive at the same time")

/mal+xka+dey+qat/ → málxkàdeyqat 'he was almost to shore when...'

/ʔa ba ʔ+loy+q_p+dey+ʔha/ → ʔà ba ʔlóyqadeyʔha 'Shall I skin them?'

/ʔa til+o+dey+ʔha/ → ʔa tílodeyʔha 'Should I leave?'

/x̣o ʔkoc+dey+ʔha/ → x̣ò ʔkócdeyʔha 'Should we build a fire?'

10.28. -d- 'potential'

This suffix means that an action has not been performed. It is sometimes translated as future, sometimes as conditional, and sometimes as potential.

Examples:

/ca+m_i+d+t/ → cámdit 'he's getting ready to hunt'

/ʔa noyoc+k_s+d+t cale/ → ʔà nóyockidit càle 'I'm drowning'

/qli+k_s+d+t cale/ → qlíkdit càle 'the weather is clearing up'

/ʔ+loy+d+t/ → ʔlóydit 'he's going to skin the animal'

/ma q̓ow+k$_s$+fed+miṯ ʔ+le+INTS+d+t/ → mà q̓ówkifedmiṯ ʔlé̓ʔlèdit "It will be helpful if you'll do something." ("you-if you do something-it will help")

/c̓i+d+t/ → c̓ídit 'he can do it'

10.29. -mlaʔm- 'almost'

This suffix indicates that an action was or is almost completed. It is always followed by the final position suffix -ya 'perfective'.

Examples:

/suq̓+mlaʔm+ya/ → súq̓mlaʔmaya 'it almost burnt'

/x̣a sca+mlaʔm+ya/ → x̣à scámlaʔmaya 'it almost got wet'

/ʔq̓od+mlaʔm+ya/ → ʔq̓ódmlaʔmaya 'he almost finished'

/qnak̓+mlaʔm+ya/ → qnák̓mlaʔmaya 'he is almost asleep'

Sections 10.30. through 10.48. describe the final position suffixes, one of which must occur on every finite verb form.

10.30. -a 'imperative'

Examples:

/ʔhe+ql+k$_s$+a/ → ʔhéqlika 'bring it up!'

/ʔ+kay+c̓$_r$+a/ → ʔkáyc̓i 'take your hat off!'

/ʔ+q̓od+a/ → ʔq̓óda 'finish it!'

/ʔ+sa+a/ → ʔsá 'wet it down'

/ʔal+k_s+a/ → ʔálki 'dig'

/daqalho+a/ → dáqalho 'gather, assemble!'

10.31. -da 'future conditional'

This suffix indicates that an action might take place in the future, usually with some conditional meaning. When used in a past tense context, it seems to mean about the same as -dey-.

Examples:

/ti sle+q_c+da/ → tì sléqda 'you might get choked'

(compare ti sléqdit 'you're gonna get choked')

/x̣a+il ţla+da/ → x̣àl ţláda 'you might fall in the water'

/yow koć+da/ → yow kóćda 'he was about to sit down'

/bde+l+da/ → bdélda 'what am I going to carry?'

/ʔawi+ba+ʔe ti ʔoqa ći+da/ → ʔáwiba?e tì ʔoqa ćída

'Who would do that to you?' ("who-to you-that-would do")

/xna duy+q́lo+da/ → xnà dúyq́lòda 'The boat might tip over!'

10.32. -dowa 'hortative'

This is a first-person imperative, either singular or plural. It has a shortened form -do.

Examples:

/cal+ʔye+q_p+dowa/ → cálʔyèqdowa 'let's go home'

/b+ǩo+dowa/ → bǩódowa 'let me tell it'

/maṭ+ko+dowa/ → máṭkòdowa 'let me lay it down'

/sce+k_s+d+t bay ca ku+dowa/ → scékdit bay cà kúdowa

'It's gonna rain, so I'd better build a house!'

("it will rain-therefore-house-I'd better build")

/?a ba ?+q̇aṭ+q_c+dowa/ → ?à ba ?q̇áṭqadowa ~ ?q̇áṭqado

'Let me cut it; I'll do the cutting.'

/wiy ba fadaǩ+dowa/ → wìy ba fádaǩdowa 'Let's butcher it.'

10.33. -hine 'imperfective optative'

This suffix contrasts with the enclitic -y 'perfective optative'. It is always found in conjunction with a preverbal element ṫa.

Examples:

/ma ṫa ?oqa ċi+q_c+hine/ → mà ṫa ?oqa ċíqahine 'I wish you would do it; You ought to do it.'[6]

mà ṫa ?oqa da ċíx̣otqahine 'I wish you wouldn't do it.'

/ṫa tawal+k_s+q_c+hine/ → ṫa táwalkiqahine 'he ought to work'

/?a yiwi ṫa x̣ol+o+q_c+hine/ → ?à yiwi ṫa x̣óloqahine

'I wish he would come.'

scèn ṫa scéx̣qahine 'I hope it rains.'

/wi+ay ṫa bxe ċe+b+k_s+hine/ → wìy ṫa bxè ċébkihine

'We oughta go watch for deer.'

/?a ta bxe bo+hine/ → ?à ta bxè bóhine 'I ought to go hunting.'

?ùyi ta tènta wálqahine 'He oughta go to town.'

10.34. -kli 'inabilitive'

This is a negative morpheme which usually, but not always, has the meaning 'unable to, can't'. It can also function independently, as a particle.

Examples:

hèqada ma ?ol núkli 'You can't say anything about it.'

/?le+INTS+kli/ → ?lé?lèkli 'It can't help him.'

?à cdókli 'I can't see.'

/mna+q_c+kli/ → mnáqkli 'it's cheap' ('it can't make you pay(?)')

yiwi méy kli 'he's not here'

?à xil célkle kè yim kli 'I used to have it, but I don't now.'

10.35. -wa 'impersonal agent'

Examples:

/tu ?al+k_s+wa/ → tu ?álkiwa 'it's already dug'

/sce+k_s+wa/ → scékwa 'it's raining'

10.36. -kle 'habitual'

Examples:

/cxol+k_s+kle/ → cxólkikle 'it always leaked'

/kšiṭ+q_c+kle/ → kšíṭqakle 'he always cheats us'

/sḳoṭ+l+kle/ → sḳóṭlikle 'he used to shovel'

10.37. -t 'positive imperfective'

This seems to be the most unmarked final position suffix, occurring on most forms within the grammar. No further examples will be given in this section.

10.38. -s 'negative imperfective'

This is the negative suffix which corresponds to -t. It is always accompanied by the negative preverbal element da, and is suffixed directly to da in non-verbal constructions.

Examples:

/da xko+s/ → da xkós 'he didn't obey'

/da xko+b+k_s+s/ → da xkóbkis 'he didn't pay attention'

ʔùyi sáqanbaq das 'that's not true'

/da x̣ma ʔšal+q_c+c_r+s/ → da x̣mà ʔšálqaċis

10.39. -ya 'perfective'

Examples:

/ʔ+su+ya/ → ʔsúya 'he marked it'

/daq̓ya+ya/ → dáq̓yaya 'I scolded him'

/ku+ya/ → kúya 'he built it'

/p̓uṭ̓+k_s+ya/ → p̓úṭ̓kiya 'he kissed her'

/q+se+q_c+ya/ → qséqya 'canned food'

/yxe+ITER+ya/ → yxéyxèya 'quit having spasms'

/yxe+ITER+k_s+ya/ → yxéyxèkiya 'have 1 spasm'

/š+q̓od+ya/ → šqódya 'he finished weaving it'

10.40. -baq 'past passive participle'

This suffix nominalizes verbs, with the meaning 'having been VERBed'.

Examples:

/bṭe+k_s+q_c+baq/ → bṭéχqabaq 'raised, grown up(of a child)'

/ʔisal+k_s+baq/ → ʔísalkibaq 'fried'

/ʔa+ʔšal+baq/ → ʔáʔšàlbaq 'hurt'

10.41. -m 'instrument or place of action nominalizer'

This suffix forms nouns with the resultant meaning of 'instrument of action' or 'place of action'.

Examples:

/ʔsu+q_c+m/ → ʔsúqam 'pen, pencil, camera'

/x̣o kaleta ba cki+ITER+m/ x̣ó kàleta ba ckíckìm 'train depot('train stops over and over')'

/cwi+ITER+m/ → cwícwìm 'violin('you strop back and forth on it')'

/kto+ITER+q_c+m/ → któktòqam 'stairs('you step on them')'

/m+lu+q_c+m/ → mlúqam 'oven' (mlu- 'bake')

/qla+q_c+m/ → qláqam 'fishing rig or fish hook' (qla- 'trap something')

/s̓cu+q_c+m x̣q̓o+wi/ → s̓cúqam x̣q̓òwi 'sucking doctor'

/xli+w+m/ → xlíwam 'sifter'

10.42. -n 'absolutive'

This suffix forms adjectives from certain verbs, such as those indicating quality, as well as state of action nouns. It also functions as the final position suffix when an evidential enclitic is present.

Examples:

/lki+DISTR+n/ → lkílkìn 'shiny; satin'

/ʔ+t̓eʔ+k_s+n+q̓o/ → ʔt̓éʔkinq̓o 'it's heavy(it feels heavy to me)'

/q+q̓ey+n x̣a/ → qq̓éyin x̣à 'ice water' (q+q̓ey- 'cold')

/sce+n/ → scén 'rain'

/ʔsu+n/ → ʔsún 'picture, photo'

/ki+n/→ kín 'string'

/kti+n/ → ktín 'corpse, very sick person' (kti- 'stab')

/ko+m_g+n/ → kóman 'wave(water)' (ko+m_g- 'put it down')

/sma+n/ → smán 'sleep' (no corresponding verb form)

10.43. -btonwa 'after'

This suffix conjoins two sentences which describe actions in a direct sequential relationship.

Example:

/ma x̣ol+o+btonwa ʔa yi+il syi+m_g+ya/ → mà x̣ólobtonwa ʔà yìl syímya 'I borrowed it after you came.' ("you-after you came-I-it-borrowed")

10.44. -day 'simultaneous'

This suffix conjoins two sentences which describe actions performed simultaneously, by the same or different subjects.

Examples:

/x̣ol+blo+t cale ʔa bte+k_s+t wa+l+day/ → x̣ólblòt cale ʔà btékit wàlday 'It happened when I was grown up.' ("it happened-I-was grown up-when")

/yi+wi?a sca+day sma+n q̇l+l+ya/ → yìwi ?a scàday smán q̇làlya 'He fell asleep while I was there.' ("he-I-when I was there-sleep-got him")

/?a wit xbac̀+day x̣ol+o+d+t/ → ?a wìt x̣bàc̀day x̣ólodit 'I come when he asks me.' ("I-me-when he asks-I'll come")

10.45. -fed 'conditional; if'

This suffix conjoins two sentences, the second of which describes an action following and conditional on the first. It is often followed by -miṭ.

Examples:

?ùyi wi yukin x̣ólofedmiṭ, dàwa da fdíkix̣otdit 'If he gets there before me, he won't know the road.' ("he-me-before-if he comes-road-not-he won't know")

?a bdókfed wiyaq̣kàcuce cáqdit 'If I throw, my cap will fall.' ("I-if I throw-my-cap-will fall")

?òmlay ?uyil ?qóyfed ?a mqódit 'If they ever head him off, I'll see it' ("they-him-if they head him off-I-will see")

10.46. -fla 'sequential'

This suffix conjoins two sentences describing actions which occur sequentially, with the same or different subject, and no necessary causal connection.

Examples:

ʔà x̣ólofla qnák̓ya 'He fell asleep after I came.' ("I-after I came-he fell asleep")

yìwi yóqfla bxè ṭláqya 'After he shot it, the deer fell over.' ("he-after he shot-the deer-fell over")

10.47. -qat 'when'

This suffix conjoins two sentences whose actions occur either sequentially or simultaneously, with the same or different subject.

Examples:

málot ke lèluša x̣óloqat 'When he came to Leluša, he landed.' ("he landed-and-Leluša-when he came")

/ʔo+mal+ay mqo+q_c+qat+miṭ hayu wo?+ITER+k_s+kle/

ʔòmlay mqóx̣qatmiṭ hàyu wó?wò?kikle 'When they holler, the dog barks.' ("they-when they holler-the dog-barks")

10.48. -yukin 'before-switch reference'

This suffix conjoins sentences which describe sequentially occurring events with different subjects.

Examples:

ʔà x̣òloyukin ṭu qnák̓inya 'He fell asleep before I came.' ("I-before I came-already-I saw he had fallen asleep")

mà mɔ́ckiyukin ʔà tílodit 'I'll go before you wake up.' ("you-before you wake up-I'll go")

Sections 10.49 through 10.56 describe the postverbal enclitics, which, when they occur, usually follow a final position suffix. The evidentials do, qo, and ya must follow -n 'absolutive'.

10.49. -miṭ 'identical subject; if'

This enclitic usually conjoins two sentences having the same subject, describing two actions which are either causally connected or simultaneous.

Examples:

/ʔo+mal+ay ta+ITER+b+k_s+c_r+t+miṭ qey+ITER+k_s+m_p+kle/ → ʔɔ̀mlay tátàbkicitmiṭ qéykiqèykimkle 'Whenever they play, they laugh.' ("they-when they play-they laugh")

/ma cinakotay qow+l+miṭ ql+l+miṭ ma cinakotay qnil+k_s til+o+d+t/ → mà cìnakotay qówlimiṭ qlálimiṭ mà cínakotay qnìlki tìlodit 'If you do bad things, when you die you will go to a bad place.' ("you-bad-when you do-when you die-you-bad-towards-will go")

10.50. -ʔe 'interrogative'

This is an interrogative enclitic for questions requiring more than a yes or no answer.

Examples:

héqatʔe tì xín 'What's your name?'

hèmalkit mày xkálitʔe 'Where are you(plural)paddling to?'

10.51. -ʔha 'yes-no interrogative'

This is an interrogative enclitic for yes-no questions.

Examples:

x̣ólоʔha 'Did you come?; Hello!' (greeting used by person visited)

scén scekitʔha 'Is it raining?'

mà ba mèl bxè bkúq̓ʔha 'Did you shoot this deer?' ("you-subject marker-this deer-did you shoot")

10.52. -we 'locative interrogative'

This interrogative is used on motion verbs, indicating 'to where?', 'from where?' or extended meanings.

Examples:

/xkal+we/ → xkálwe 'Where are you paddling?'

ca ba mel bxè bkúq̓we 'Who shot this deer?' ('Where did the shot come from?')

10.53. -do 'quotative'

This is an evidential enclitic, meaning that the sentence is either a direct quote or is known because someone else reported it to you.

Examples:

/nu+n+do/ → núndo 'he said' This is used throughout narratives.

/bku+q_c+n+do/ → bkúqando 'he shot it'

/til+mli+d+n+do/ → tílmlìdindo 'he's gonna throw it away'

10.54. -q̇o 'introspective'

This is an evidential enclitic which means that the sentence contains information known because of introspection on one's thoughts or senses.

Examples:

/wit ?ṭe?+k_s+n+q̇o/ → wìt ?ṭé?kiŋq̇o 'it's too heavy for me'

/bošṭo+n+q̇o/ → bóšṭoŋq̇o 'I'm glad; thanks'

/mt̀e+k_s+n+q̇o/ → mtékiŋq̇o 'I'm hot'

/ċma x̣qo+q_c+c_r+n+q̇o/ → ċmà x̣qóqciŋq̇o 'it's good to a sense(tastes good, smells, feels, sounds, looks good)'

10.55. -ya 'visual'

This is an evidential enclitic which means that

the preceding information is known because of visual evidence(or extended meaning).

Examples:

yil bdù fdínya 'He took the acorn.'

ʔuyi ʔà ba ċìndo núnya 'He said that I did it.'

("he-I-subject-did it,quotative-he said,visual")

10.56. -y 'perfective optative'

This suffix contrasts with the previously discussed -hine 'imperfective optative'. It usually, but not always, indicates perfective aspect. It is usually found with one of two preverbal elements, ta or laq; no meaning difference between them was observed.

Examples:

/ma mqo+q_c+ya+y/ → mà mqóqayay 'You should have seen it; I wish you had seen it.'

/ma laq ʔoqa ċi+q_c+ya+y/ → mà laq ʔoqa ċíqayay 'I wish you had done it' also mà ta ʔoqa ċíqayay

/ʔa ta ti bo+q_c+ya+y/ → ʔà ta ti bóqayay 'I should let you go hunting.'

NOTES TO PART THREE

[1]Julius Moshinsky, "Historical Pomo Phonology" (to appear).

[2]Sally McLendon, Eastern Pomo and Robert Oswalt, A Kashaya Grammar.

[3]This concept is elucidated by Jeffrey S. Gruber in his Studies in Lexical Relations, Ph.D. dissertation reproduced by the Indiana University Linguistics Circle, January, 1970, pages 1-5.

[4]I will use Leonard Talmy's term "figure" (personal communication), rather than Gruber's term "theme". These seem to be equivalent concepts. I wish to thank Leonard Talmy for numerous helpful discussions of these problems--the interpretations are strictly my own responsibility.

[5]Gruber, page 29. Gruber's term "source of the motion", which partially overlaps with "agent", will also be used.

[6]The q- receives an epenthetic -a- because the following consonant is part of a final position suffix,

even though that consonant is not itself word-final. The Post-tonic Vowel Epenthesis rule should be revised to indicate that the final position suffix consonant may be followed by other segments. Epenthesis does not always take place before the final position suffix -ya, however.

PART FOUR - ADJECTIVES AND NOUNS

Chapter Eleven. Adjectives

11.1. Introduction

Most adjectival words in Southeastern Pomo, as can be seen throughout the verb morphology, are in fact fully inflected verbs. For instance, all colors, except for yellow, are reduplicated verbs. 'Yellow', /k?ilto/ → ki?ilto, like the other morphemes which will be called true adjectives, cannot take verbal inflections. Both true adjectives and those intransitive verbs which correspond to English adjectives can be the predicate of the sentence. Therefore, my classification of morphemes as adjectives is morphological rather than syntactic.

The category of uninflectable adjectives will be exemplified in this chaper, with some morphology pointed out.

11.2. Adjectives in -baq

There are adjectives ending in the suffix -baq, which is assumed to be the same morpheme as the past passive participle marker on verbs, for which there are no corresponding verb forms.

Examples:

xék̓ubaq 'first'

hédabaq 'foreign, alien'

k̓dílbaq 'false'

wálbaq 'right(correct)'

ʔuyi sáqanbaq das 'That's not true, not real.'

kébaq 'new' (ké 'now')

11.3. -k̓li 'negative'

Adjectives can be formed by suffixing -k̓li to nouns or verbs.

Examples:

ʔo 'tooth' + -k̓li → ʔók̓li 'dull(not sharp)'

ṯfal- 'dirty' + -k̓li → ṯfalk̓li 'clean'

cnu 'word, language' + -k̓li → cnúk̓li 'mute, dumb'

11.4. -n 'absolutive'

Many adjectives end in -n, which is probably the same as the absolutive suffix on verbs.

Examples:

sáqan 'real, true'

mṯun, mṯunbaq 'old' (compare mṯúwi 'old man')

kúčin 'small, little'

11.5. -myak

This suffix has been found on only one adjective, /b?a-/ 'rich, rich man', and on a noun, knílmyak 'sprinter'.

Examples:

b?ámyak 'rich, rich man'

b?ámyak bt̓èd 'rich woman' (also b?ám?ed)

b?ák̓li 'poor, poor man'

11.6. Further Examples of Adjectives

?úx̣qat 'all, every'

bt̓énik̓ 'big(singular)'

t̓ínay 'big(plural)'

pínt̓o 'spotted(Spanish loan)'

ló·xo 'lazy(Spanish loan)'

c̓ínak̓ot̓ay 'bad'

c̓má 'good'

móloq 'false, ersatz' móloq ?ò 'false teeth'

?lémay 'half'

Chapter 12. Nouns

12.1. Introduction

Nouns are syntactically defined in Southeastern Pomo as morphemes or sequences of morphemes to which various case and number suffixes and postpositions can be appended. Many nouns are derived from verb stems, but an equally large or larger number are not.

In this chapter I will define the subclasses of nouns and pronouns, list the case suffixes and postpositions, and present various nominalization processes.

12.2. Noun Subclasses

Nouns have been divided into the following subclasses:

Nouns

1. Animate Nouns
    a. Human Nouns
        1) Kinship Nouns
        2) Other Human Nouns
    b. Non-human Animate Nouns
2. Inanimate Nouns
    a. Locative nouns
    b. Other Inanimate Nouns

Pronouns

These subclasses have been set up on both morphological and syntactic grounds. Animate nouns can be distinguished from inanimates by their ability to take benefactive and possessive case endings. Human nouns can be distinguished from other animate nouns because only human nouns have a plural form. Kinship nouns can be distinguished from other animates by the fact that they take the prefix m- 'kinship', many have an irregular first person possessive prefix ?i-, and many have a separate vocative form.

Locative nouns can be distinguished from other inanimates by the fact that they can take the objective suffix, the two locative suffixes -y and -w, and the verbalizing suffix -lk- 'to a place'.

12.3. Case Suffixes

12.3.1. -il 'object case'

This suffix marks the surface 'object' case.

Examples:

/hayu+il/ → háyul 'dog'

/ca+wi+il/ → cáwil 'man'

/x̣q̣o+mfo+il/ → x̣q̣ómfol 'doctors'

/?a+f+di+q_c+il/ → ?áfdiqil 'wise man'

12.3.2. -itib 'benefactive'

Examples:

/hayu+itib/ → háyutib 'for the dog'

/ṭonci+itib/ → ṭóncitib 'for the cat'

/qwi+itib/ → qwítib 'for the baby'

/balak+wi+itib/ → bálakwitib 'for the captain'

12.3.3. -it 'inalienable possession'

This suffix is used when the possessed noun refers to such things as personal relations(kin, friends, etc.)and body parts.

Examples:

/hayu+it xin/ → háyut xìn 'the dog's name'

/bṭed+it xal/ → bṭédit xàl 'the woman's arm'

/wi+m+ʔe+it xela/ → wímʔet xèla 'my father's friend'

/qwi+it m+še/ → qwít mše 'the baby's mother'

12.3.4. -it+baq 'alienable possession'

To indicate alienable possession, the suffix -baq is added to the -it suffix. When a possessor noun stands alone without the possessed noun, it always takes this longer form.

Examples:

/hayu+it+baq/ → háyutbaq 'the dog's'

/ʔuyi+it+baq ca/ → ʔúyitbaq cà 'his house'

/ma+it+baq/ → mátbaq 'yours (plural)'

12.3.5. -y 'in'

This locative suffix means 'in' or 'into', in the sense of 'in or into an enclosed but not covered over space'. It can be followed by the objective suffix.

Examples:

/bda+y/ → bdáy 'in the creek'

/mo+y/ → móy 'in the hole'

/x̣a+y+il/ → x̣áyil 'into the water'

/xna+y/ → xnáy 'in the boat'

12.3.6. -w 'within'

This suffix means 'in or into a covered space'.

Examples:

/ca+w/ → cáw 'in the house' (This also serves as an adverbial meaning 'inside'.)

/ca+w+il/ → cáwil 'into the house'

/x̣a+w/ → x̣áw 'in the mouth' (x̣a- is from x̣ásto 'mouth')

12.4. Number Suffixes

In this section I will present the plural suffixes, which may be added to animate nouns, as well as the 'human singular' and 'human plural' suffixes, which are found on many human nouns. Case suffixes are attached to nouns following the number suffix.

12.4.1. -wi 'human singular'

Examples:

/mʈ̓u+wi/ → mʈ̓úwi 'old man'

/x̣̓qo+wi/ → x̣̓qówi 'doctor'

/m?i+k+al+wi/ → m?íkalwi 'buyer'

/fʈeʈi+k+wi/ → fʈéʈikwi 'clown'

/kma+wi/ → kmáwi 'enemy'

/le+wi/ → léwi 'flirt'

12.4.2. Plurals

12.4.21. -mfo 'human plural'

This suffix comes from the noun mfo 'people'.

Examples:

/mʈ̓u+mfo/ → mʈ̓úmfo 'old people' There is an alternate form /mʈ̓u+k+m+ay/ → mʈ̓úkmay.

/kma+mfo/ → kmámfo 'enemies'

/m?i+k+m+a+mfo/ → m?íkmamfo ~ /m?i+k+a+mfo/ → m?íkamfo 'buyers'

/ẋa+win+mfo/ → ẋáwinmfo 'Southeastern Pomo' ('on-the-water people')

12.4.22. Other Plurals

The situation is quite complex with regard to the other plural suffixes. Two morphs which recur in the variants of the suffixes are -ay and -k. The following patterns have been observed:

1) -ay
2) -l+ay
3) -k+m+ay
4) -l+ay ~ k+m+ay
5) -k+m+a+l+ay
6) -t+ay

There do not seem to be any semantic distinctions between these various suffixes. A particular variant is selected by a given morpheme.

In addition, there are some irregular plural formations in human nouns derived from verbs. Some of these are:

/ba+ć́iw+al/ → báć́iwal ~ /ć́i+al+wi/ → ć́iwalwi 'killer'

/ba+ć́iw+$ć́_p$+mfo/ → báć́iwć́imfo 'killers'

/bxe+bol+wi/ → bxébolwi 'hunter'

/bxe+ć́+ay+b+al+mfo/ → bxéć́aybalmfo 'hunters'

/qwa+c̓+w+al/ → qwác̓iwal 'cook'

/qwa+c̓+w+c̓$_p$/ → qwác̓iwic̓ 'cooks'

Examples:

/qṯa+ay/ → qṯáy 'old women'

/bṯed+l+ay/ → bṯélay 'women'

/b?a+x̣+di+n+l+ay/ → b?áx̣dinlay 'poor men'

/b?a+myak+l+ay/ → b?ámyaklay ~ /b?á+k+m+ay/ → b?ákmay 'rich men'

/x̣q̓o+k+m+ay/ → x̣q̓ókmay ~ /x̣q̓o+k+m+a+l+ay/ → x̣q̓ókmalay 'doctors'

/balak+k+m+a+l+ay/ → bálaxkmalay 'captains'

/qwi+k/ → qwík 'babies'

/bṯed+l+ay qwi+k/ → bṯélay qwik 'baby girls'

/xela+t+ay/ → xélatay 'friends'

/knil+myak+l+ay/ → knílmyaklay ~ /knil+k+m+ay/ → knílkmay 'runners, sprinters'

12.5. -lk- 'to a place'

This is the only morpheme I have found which derives verbs from nouns. Added to a locative noun, it has the meaning 'to that place'. It is probably analyzable as a sequence of -l- 'object case' + -k$_s$- 'semelfactive.

Examples:

/ʔlem+lk+t/ → ʔelémalkit 'he went to Sulfur Bank'

/tenta+lk+t/ → téntalkit 'he went to town'

/caduwa+lk+t/ → cáduwalkit 'he went north'

/ʔlem mdo+n win +lk+t/ → ʔelém mdòn wìnilkit 'he went to Rattlesnake Island' (This is an example of an entire noun phrase being verbalized.)

12.6. Postpositions

In addition to the case suffixes, noun phrase grammatical relations and locatives are also expressed by a set of postpositions. Many, perhaps all, of these postpositions can be transformed into place adverbials by the addition of the suffix -wa. So from bṭon 'after', you can derive bṭonwa 'afterwards'. Those postpositions which I was able to elicit with -wa will be indicated by (wa) following them, in the list below.

beṭ 'with(comitative)'

bṭon(wa) 'after(time)'

daw 'in front of'

day 'while, during, through'

duwa(wa) 'across'

fla 'after'

knon(wa) 'above, upstream'

lew 'close to(towards)'

mamal(wa) 'beside, along'

man(wa) 'in back of'

mlal(wa) ~ mlala 'over, on top of'

moy(wa) 'out of'

muṭu 'close, near'

qan 'on, into, in'

q̇na 'from, on(your)side'

ṭal(wa) 'on one side of'

wa 'on, from, off'

way 'with(instrument), inside of'

win 'on'

x̣an(wa) 'below, downstream'

x̣ma 'inside of'

x̣maya(wa) ~ x̣may 'in, inside, partitive'

x̣o 'outside'

xwat(wa) 'inside'

yow(wa) 'under, below'

yukin(wa) 'ahead of, before'

12.7. Pronouns

The personal pronouns and demonstratives form a single unified system in Southeastern Pomo. They distinguish the following grammatical categories: (isolable morphs are in parentheses)

Person: First (wi-)
Second (ma-)
Third

Number: Singular
Plural (-ay

Gender(in Third Person):
Masculine (-yi, -wi)
Feminine (-med)

Position with Relation to Speaker:
Near--this (mi-, me-)
Far--that

Displacement:
Non-displaced
Displaced (yi-)

Case: Subject
Object (-il)
Benefactive (-itib)
Alienable Possession (-it+baq)
Inalienable Possession (-it)

The category which I am calling 'displacement' indicates the presence or absence of the referent of the demonstrative in the speech situation. It could alternatively be termed 'visibility', since presence in the visual field is also part of the distinction.

The pronouns will now be charted, first in systematic phonemic form, and underneath in systematic phonetic form:

PERSON	SUBJECT	OBJECT
1 Sg	/ʔa/ ʔá	/wi+t/ wít
2 Sg	/ma/ má	/ti/ tí
3 Sg/masc/non-displ/unmarked position	/ʔu+yi/ ʔúyi	/ʔu+yi+il/ ʔúyil
3 Sg/masc/non-displ/near	/mi+yi/ míyi	/mi+il/ míl ~ mél
3 Sg/masc/non-displ/far	/ʔi+yi/ ʔíyi	/ʔi+yi+il/ ʔíyil
3 Sg/masc/displ	/yi+wi/ yíwi	/yi+wi+il/ yíwil
3 Sg/fem/non-displ/near	/me+med/ mémed	/me+med+il/ mémdil
3 Sg/fem/non-displ/unmarked position	/ʔo+med/ ʔómed	/ʔo+med+il/ ʔómdil
3 Sg/fem/displ	/yi+med/ yímed	/yi+med+il/ yímdil

BENEFACTIVE	ALIENABLE POSS	INALIENABLE POSS
/wi+itib/	/wi+it+baq/	/wi/
wítib	wítbaq ~ wíbaq ~ wíyaq	wí
/ti+itib/	/ti+it+baq/	/ti ~ ti+it/
títib ~ tíb	títbaq ~ tíbaq ~ tíyaq	tí ~ tít
/ʔu+yi+itib/	/ʔu+yi+it+baq/	/ʔu+yi+it/
ʔúyitib	ʔúyitbaq	ʔúyit
/miy+itib/	/miy+it+baq/	/miy+it/
míyitib	míyitbaq	míyit
/ʔi+yi+itib/	/ʔi+yi+it+baq/	/ʔi+yi+it/
ʔíyitib	ʔíyitbaq	ʔíyit
/yi+wi+itib/	/yi+wi+it+baq/	/yi+wi+it/
yíwitib	yíwitbaq	yíwit
/me+med+itib/	/me+med+it+baq/	/me+med+it/
mémditib	mémditbaq	mémdit
/ʔo+med+itib/	/ʔo+med+it+baq/	/ʔo+med+it/
ʔómditib	ʔómditbaq	ʔómdit
/yi+med+itib/	/yi+med+it+baq/	/yi+med+it/
yímditib	yímditbaq	yímdit

PERSON	SUBJECT	OBJECT
3/unmarked number and position		/ʔo+il/ ʔól
1 Pl	/wi+ay/ wíy	/wi+il/ wíl
2 Pl	/ma+ay/ máy	/ma+il/ mál
3 Pl/unmarked position	/ʔo+mal+ay/ ʔómlay	/ʔo+mal+ay+il/ ʔómlayil ~ ʔómlayl
3 Pl/near	/me+mal+ay/ mémlay	/me+mal+ay+il/ mémlayil
3 Pl/far	/mal+ay/ málay	/mal+ay+il/ málayil ~ málil
Each, someone	/ca+da/ cáda	/ca+da+il/ cádal
Some people	/tay+da/ táyda	/tay+da+il/ táydal
Reflexive		/sen/ sén

BENEFACTIVE	ALIENABLE POSS	INALIENABLE POSS
/wi+il+itib/	/wi+it+baq/	/wi+it/
wíltib	wítbaq	wít
/ma+il+itib/	/ma+it+baq/	/ma+it/
máltib	mátbaq	mát
/ʔo+mal+ay+itib/	/ʔo+mal+ay+it+baq/	/ʔo+mal+ay+it/
ʔómlaytib	ʔómlayitbaq	ʔómlayit
/me+mal+ay+itib/	/me+mal+ay+it+baq/	/me+mal+ay+it/
mémlaytib	mémlayitbaq	mémlayit
/mal+itib/	/mal+ay+it+baq/	/mal+it/
mál̤tib	málayitbaq ~ málitbaq	málit
/ca+da+itib/	/ca+da+it+baq/	/ca+da+it/
cádatib	cádatbaq	cádat
/tay+da+itib/	/ba+baq/	/ba+baq/
táydatib	bábaq	bábaq

12.8. Kinship Nouns

Kinship nouns form a separate subclass of animate nouns because of their more elaborate morphology. In addition to occurring with a post-pronominal prefix /-m-/, they are the only words in the nominal system which may have a separate form for the vocative.

Nearly all kinship terms occur prefixed with the normal inalienable possession pronouns, with a special complication in the first person, explained below. Whether or not all kinship words can appear without a pronoun has not been determined. It is certain, however, that most kin terms not prefixed by -m- can occur unpossessed, and that certain -m- forms can occur thus. Four terms, wóq̓ṭa 'great grandmother', wówo 'great grandfather', ṭó?mela 'child's spouse's parent', and x̣ácin 'sister's child' have not been elicited with pronominal prefixes.

The -m- prefix occurs on the non-vocative forms of all kinship terms elicited, with the exception of the terms for great grandparents, mate, son, sister's child, and son-in-law.

The pronominal prefix /?i-/ is an alternate first person singular morpheme which occurs only with terms denoting non-descending generation. It is the only first person pronoun occurring with most of these, such as ?ímsen 'my mother's brother', but some also occur with wi, and have specialized the ?i- form as a

vocative, as in wí mšè 'my mother' and ʔíšek 'mother!'.

The vocatives, when morphologically differentiated from the non-vocative first person singular, may be formed in one of three ways:

1. The ʔi- prefix replaces wi, with concurrent alteration of the stem form, and sometimes removalof the -m- prefix: wí mʔè 'my father' and ʔímek 'father!'.

2. The -m- prefix is removed, with no pronoun prefixed: wí mqòṭ 'my grandchild' and qóṭ 'grandchild!'.

3. There is a suppletive form, with no pronoun: wí mdùtaq 'my younger brother' and ćúman 'younger brother!'.

Most of the kinship terms have been elicited in the plural, which is in this subclass always formed with -l+ay: wí mdèqlay 'my older sisters', ʔíšeklay 'my mothers!'(addressing women older than yourself), and wí χàlay 'my sons'.

A list of kinship terms follows, with forms cited in the first person singular, followed by vocative, if differentiated.

CONSANGUINEAL

/wo+q̓ṭa/ → wóq̓ṭa 'great grandmother'

/wo+wo/ → wówo 'great grandfather'

/ʔi+m+qa/ → ʔímqa 'mother's mother'

/ʔi+m+ma/ → ʔímma 'father's mother'

/ʔi+m+cen/ → ʔímcen 'mother's father'

/ʔi+m+bac̓/ → ʔímbac̓ 'father's father'

/wi m+še/ → wí mšè 'mother'

/ʔi+šek/ → ʔíšek 'mother!'

/wi mʔe/ → wí mʔè 'father'

/ʔi+mek̓/ → ʔímek̓ 'father!'

/wi m+šud/ → wí mšùd 'mother's younger sister'

/ʔi+m+xyaq/ → ʔímxyaq 'mother's older sister'

/ʔi+m+sen/ → ʔímsen 'mother's brother'

/ʔi+m+we/ → ʔímwe 'father's sister'

/ʔi+m+ceχ̣/ → ʔímceχ̣ 'father's brother'

/wi m+t̓aq/ → wí mt̓àq 'younger sister'

/ʔaṭχ̣a/ → ʔáṭχ̣a 'younger sister!'

/ʔi+m+deq/ → ʔímdeq 'older sister'

/wi m+du+taq/ → wí mdùtaq 'younger brother'

/c̓uman/ → c̓úman 'younger brother!'

/ʔi+m+meq/ → ʔímmeq 'older brother'

/wi χ̣ad/ → wí χ̣àd 'son'

/wi m+fad/ → wí mfàd 'daughter'

/χ̣ac̓in/ → χ̣ác̓in 'sister's child'

AFFINAL

/wi da/ → wí dà 'wife'

/wi ʔba/ → wí ʔbà 'husband'

/wi m+qon/ → wí mqòn 'sister's husband'

/ʔi+m+qon/ → ʔímqon 'sister's husband!'

/wi yaqmed/ → wí yàqmed 'brother's wife'

/wi m+xa/ → wí mxà 'spouse's mother'

/wi m+cac/ → wí mcàc 'wife's father'

/wi m+ba/ → wí mbà 'husband's father'

/wi m+faq/ → wí mfàq 'wife's brother'

/wi m+faq bṭed/ → wí mfàq bṭed 'wife's sister' (bṭed 'woman')

/wi m+qaṭin/ → wí mqàṭin 'husband's sister'

/wi m+x̣utaq/ → wí mx̣ùtaq 'husband's brother'

/wi ʔmoɗ/ → wí ʔmòd 'son-in-law'

/wi m+ʔoɗ/ → wí mʔòd 'daughter-in-law'

/ṭoʔmela/ → ṭóʔmela 'child's spouse's parent'

12.9. Nominalization

Five nominalization processes will be described in this section.

12.9.1. No Nominalization Affix

Nouns can be formed from verbs with no affix overtly marking nominalization. Such a noun will always lack a final position suffix.

Examples:

qwa 'food' (q+wa- 'eat')

ḳeḉ 'piece' (ḳeḉ- 'cut')

/ʔo šu+ITER+m_i+$ċ_r$/ → ʔó šùšùmiċ 'toothpick' (šu- 'pick')

/bay+cnu+q_c/ → báycnùq 'preaching'

/ḳde+l/ → ḳdél 'chewing tobacco' (ḳde- 'chew')

12.9.2. -m 'instrument or place of action nominalization'

This suffix is discussed in section 10.41.

12.9.3. -n 'absolutive'

Nominalization is one of the functions of this suffix. It is discussed in 10.42.

12.9.4. -al±wi/-mfo 'agent nouns'

The formation of agent nouns with -wi(singular) and -mfo(plural)is exemplified in sections 12.4.1. and 12.4.21. As will be seen in these examples, -wi is often preceded by a suffix -al. Examples of -al without -wi will be given in section 12.9.5.

12.9.5. ?a- 'nominalizing prefix'

This prefix forms nouns meaning 'one who does (verb)'.

Examples:

/?a+?+ka̱t+al/ → ?á?ka̱tal 'thief' ('do wrong')

/?a+b+ka̱t+al/ → ?ábka̱tal 'liar' ('say wrong')

/?a+b+ko/ → ?ábko 'story-teller' ('tell')

/?a+f+di+q_c/ → ?áfdiq 'wise man' ('know')

12.10. Interrogatives

All interrogative words occur in two forms: the basic form, ending in the interrogative suffix -?e, and the quotative form, occurring in narrative, in which the -?e suffix is replaced by -do 'quotative'. A list of interrogative words follows.

/?awi+?e/ → ?áwi?e 'what?'

/?awi+do/ → ?áwido (quotative)

/?awi+way+?e/ → ?áwiway?e 'what with, what for?'

/?awi+way+do/ → ?áwiwaydo (quotative)

/?awi+x̱ma+?e/ → ?áwix̱ma?e 'what in?'

/?awi+x̱ma+do/ → ?áwix̱mado (quotative)

/bsin+?e/ → bsín?e 'how many?'

/bsin+do/ → bsíndo (quotative)

/bsin+way+ʔe/ → bsínway?e 'what time?' (I am not sure of this form)

/bsin+way+do/ → bsínwaydo (quotative)

/btey+ʔe/ → btéy?e 'when?'

/btey+do/ → bteydo (quotative)

/ca+ʔe/ → cá?e 'who?'

/ca+do/ → cádo (quotative)

/hel+ʔe/ → hél?e 'which one(inanimate)?'

/hel+do/ → héldo (quotative)

/hiy+ʔe/ → híy?e 'which one(animate)?'

/hiy+do/ → híydo (quotative)

/he+mal+a+ʔe/ → hémla?e 'where from, on which side?'

/he+mal+a+do/ → hémlado (quotative)

/he+mal+k_s+t+ʔe/ → hémalkit?e 'where to?'

/he+mal+k_s+t+do/ → hémalkitdo (quotative)

/he+qat+ʔe/ → héqat?e 'how?'

/he+qat+do/ → héqatdo (quotative)

/he+qat+way+ʔe/ → héqatway?e 'why?'

/he+qat+way+do/ → héqatwaydo (quotative)

/he+y+ʔe/ → héy?e 'where?'

/he+y+do/ → héydo (quotative)

PART FIVE - SYNTAX

Chapter 13. Syntax

13.1. Introduction

In this chapter I will attempt to present an overview of Southeastern Pomo syntactic organization. It is intended to be suggestive, groundwork for future research, rather than an attempt to handle any specific problem definitively.

Specifically, an adequate semantic-syntactic analysis of grammatical relations between noun phrases and the verb will not be undertaken. The syntactic framework of Noam Chomsky in Aspects of the Theory of Syntax, which allows for a superficial treatment of these problems, will be more or less adhered to. Semantic categories which must be handled in the morphology, such as 'source of motion' and 'figure', will not be characterized in the syntax, rather, 'subject-of' and 'object-of' configuratively defined.

In addition, problems of the somewhat free word order, and its semantic and stylistic consequences will not be treated. Sentences will be generated in what seems to be the neutral order, with some permutations transformationally derived. Likewise, neither the order, syntactic classification, or internal structure of adverbials will be presented.

13.2. Phrase Structure Rules

A set of phrase structure rules, producing deep structure phrase markers, will be postulated in this section.

1. $S \longrightarrow \left\{ \begin{array}{l} (da+Neg)\ (Adv)\ NP\ (ba)\ Pred\ Phrase\ (Adv) \\ S\ (ke)\ S \end{array} \right\}$

This initial rewrite rule introduces the immediate constituents of the sentence. The second line of the rewrite produces a series of conjoined sentences, optionally connected with the coordinating conjunction ke, of any length.

The optional morpheme ba is a marker of subject, and is used especially in sentences which might otherwise be ambiguous, such as the following.

/ʔu+yi ʔa ba ci+n+do nu+n+ya/ ⟶ ʔuyi ʔa ba cindo nunya

'He said that I did it.' (he-I-ba-did it-said)

2. $Pred\ Phrase \longrightarrow \left\{ \begin{array}{l} (NP)\ (NP)\ (Post\ Phrase)\ (Post\ Phrase) \\ \qquad\qquad\qquad\qquad (da+Neg)\ (VP) \\ Predicate \end{array} \right\}$

This rule rewrites the predicate phrase as either

a series of noun phrases and postpositional phrases (arbitrarily indicated in number and order)followed by a Verb Phrase, or as a Predicate, which is then specified as either a predicate nominal or as an adjective(since there is no copula).

3. Predicate $\longrightarrow$ { NP / Adjective }

4. NP $\longrightarrow$ { (NP) S / NP NP (ke) / { { Possessive / [+N, +deictic] / Numeral } (NP) / { N / Pron } Number } }

This rule expands Noun Phrase into sequences which include one or more noun phrases, as well as into the constituents of NP: a noun or pronoun, plus an indicator of singular, dual, or plural number.

The first line introduces a nominal sentential complement, with or without a head noun. The second line produces conjoined NP's, followed by an optional

coordinating conjunction. The third line produces a noun phrase with a possessive, demonstrative or numeral modifier, as well as the modifier standing without a head noun phrase.

5. Number → { Singular, Dual, Plural }

6. Possessive → NP { Inalienable, Alienable }

This rule specifies a possessive modifier as alienable or inalienable, in agreement with the head noun of the phrase.

7. Pron → Pers (Deic) (Gender)

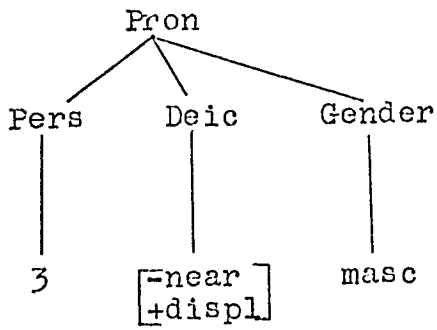
8. Pers → { 1, 2, 3 }

9. Deic → [±near, ±displaced]

10. Gender $\rightarrow$ $\begin{bmatrix} \text{masc} \\ \text{fem} \end{bmatrix}$

Rules 7-10 specify a pronoun as to person and, in the case of third person pronouns, deixis and gender.

For example, the pronoun yiwi 'he(displaced)' is generated thusly:



A readjustment rule will operate on this sequence of formatives, producing the underlying phonological shape of the stem:

$$3\ \text{Pers} + \begin{bmatrix} \text{-near} \\ \text{+displ} \end{bmatrix} + \text{masc} \rightarrow \text{yiwi}$$

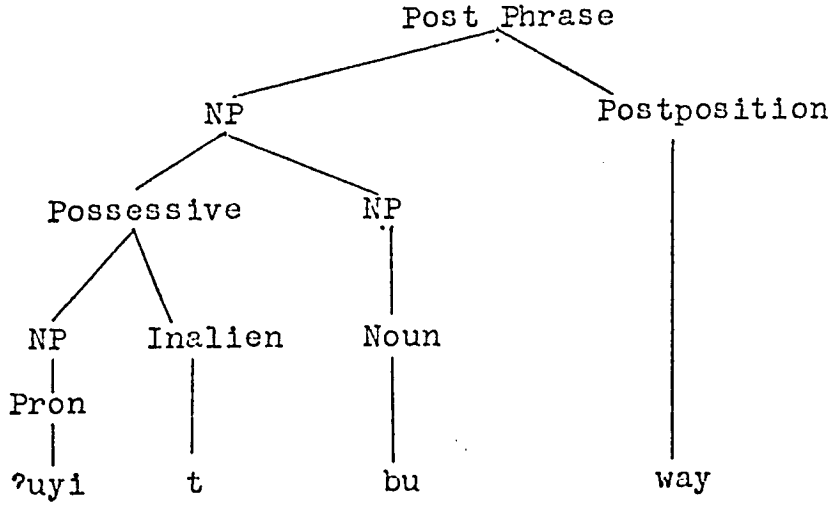
In the sample text in Chapter 14, such formative configurations will be assumed in the generation of pronouns, and for simplicity, they will be replaced by the shorthand notation:

11. Post Phrase → NP Postposition

12. Postposition → { win, mlala, tib, etc. }

Rules 11 and 12 generate postpositional phrases. Although -tib 'benefactive' is treated paradigmatically as a case suffix, in this syntactic sketch it will be generated as a postposition.

An example of a postpositional phrase follows.



'with his finger'

13. VP → (Adv) (Adv) (da+Neg) Verb

This rule expands Verb Phrase into an optional sequence of adverbs, plus an optional verb phrasal negation marker, plus the verb.

14. Verb → (Dir) (IP) V (Aspect) (Mode) (Evidential)

15. Dir → { bay, mal, mlu, etc. }

16. IP → { ?, b, f, etc. }

17. Aspect → { HAB, INTS, DISTR, ITER, ITCOM } (w) { b, š, ṗ, t } (m_i) { k_i, k_s } (l) ($\dot{c}_p$) { kle, t, ya, n }

18. Mode $\longrightarrow$ $\left\{\begin{matrix} d \\ dey \\ mla^{?}m \end{matrix}\right\}$

This rule introduces one of the three modal elemets which is not a final position suffix or enclitic.

19. Evidential $\longrightarrow$ $\left\{\begin{matrix} do \\ ,qo \\ ya \end{matrix}\right\}$

Rules 14-19 develop the Verb Complex. The ordering of the suffixes is somewhat arbitrary; it may be that the deep structure ordering of suffixes is indeterminate. See 13.3.28.

20. $\left\{\begin{matrix} N \\ V \\ Adjective \\ Adv \end{matrix}\right\} \longrightarrow CS$

Rule 20 is an instruction to rewrite a node labelled with one of the four lexical categories as a Complex Symbol, which initiates the insertion of an

appropriate lexical item.

13.3. Transformational Rules

An ordered set of transformations will be presented in this section. Most of these transformations are exemplified in the sample text in Chapter 14.

13.3.1.

T1. CAUSATIVE REDUCTION

SD: X - Verb - $?xe...]_{verb}$ - Y
1 2 3 4

SC: 1 2 3 4 $\Rightarrow$ 1 $2+q_c$ 4

This transformation reduces the periphrastic form of the causative construction to the causative suffix. The claim is that the two constructions are equivalent; this may not hold up under further analysis.

13.3.2.

T2. REFLEXIVIZATION

SD: $[_S$ W - NP_1 - X - NP_2 - Y - V - Z $]_S$ where $NP_1 = NP_2$
1 2 3 4 5 6 7 referentially

SC: 1 2 3 4 5 6 7 ⇒ 1 2 3 4 5 6+$\acute{c}_r$ 7

This transformation inserts the reflexive suffix into a verb suffix string when there are two referentially identical noun phrases, which are always subject and object.

13.3.3.

T3. RECIPROCALIZATION

This transformation inserts the reciprocal suffix into the verb suffix string when proper conditions have been met in the sentence for a reciprocal meaning. While the details of this process have not yet been worked out, a simple case might work like this:

SD: X - [-sg]$_{NP}$]$_S$ - Y - V - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3 4+$\acute{m}$ku 5

So, for example,

?o+mal+ay $\acute{c}$i+l+t

⇒ ?o+mal+ay $\acute{c}$i+$\acute{m}$ku+l+t

→ ?omlay $\acute{c}$im$\acute{k}$olit 'They were fighting each other.'

13.3.4.

T4. EQUI-NP DELETION

SD: X - NP_1 - Y-NP_2 - Z where NP_1 = NP_2 referentially
1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3 5

This transformation deletes a noun phrase which is referentially identical to a preceding noun phrase in the same sentence.

13.3.5.

T5. PRONOUN DELETION

SD: X - Pron - Y where Y is not a postposition or
1 2 3 possessive element

SC: 1 2 3 ⇒ 1 3

This transformation optionally deletes a subject or object pronoun whose identity is knowable from linguistic or non-linguistic contexts.

13.3.6.

T6. PLURAL SOURCE CONCORDANCE

SD: X - $\begin{bmatrix}+\text{plural}\\+\text{source}\end{bmatrix}_{NP}$ - Y - V - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3 4 (PLS) (k_p) (m_p) 5

This is one of four transformations which scans the sentence for a noun phrase which is marked with a particular case and number specification, and inserts one or more morphemes into the verb suffix sequence, which indicates concordance with this noun phrase.

The insertion of such concordance morphemes is not obligatory in all instances. Whether or not a given morpheme is inserted into a verb suffix sequence, when the proper noun phrase is present, may be determined by the verb stem, the co-occurence of other morphemes in the string, individual variation, or other conditions. Examples of many verb forms can be found in Part Three.

This particular transformation inserts from one to three morphemes into a suffix sequence when there is a noun phrase in the sentence which is marked as a Source of Motion and plural number. Since such distinctions as Source are not represented in the phrase markers of

this set of syntactic rules, noun phrases must be considered to be interpretable in terms of features such as [+source].

13.3.7.

T7. PLURAL FIGURE CONCORDANCE

SD: X - $\begin{bmatrix}+\text{plural}\\+\text{figure}\end{bmatrix}_{NP}$ - Y - V - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3 4 (PLF) (y) (k_p) 5

This transformation inserts one to three suffixes if there is a noun phrase in the sentence marked for Figure and plural number.

13.3.8.

T8. NON-SINGULAR NP CONCORDANCE

SD: X - [-sg]$]_{NP}$ - Y - V - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3 4+q_p 5

This transformation inserts the suffix -q_p- if

there is a noun phrase in the sentence which is either dual or plural in number.

13.3.9. DUAL NP CONCORDANCE

SD: X - $[+dual]]_{NP}$ - Y - V - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3 4+tta 5

This transformation inserts the suffix -tta- if there is a noun phrase in the sentence which is marked for dual number.

13.3.10.

T10. NEGATIVE MOVEMENT

SD: X - da-Neg - Y - V - Z

1 2 3 4 5 6

SC: 1 2 3 4 5 6 ⇒ 1 4 2 5 3 6

This transformation moves the (da+Neg) negation marker, either within or outside of the Predicate Phrase, to the verb of the sentence, the da preposed, and the Neg after the verb stem. Neg will be operated on by the

following readjustment rule:

$$\text{Neg} \rightarrow \left\{ \begin{array}{l} s \;/\; \_\_ \ldots t \\ \text{xot} \;/\; \_\_ \_\_ \end{array} \right\}$$

13.3.11.

T11. KE MOVEMENT

SD: $X]_S$ - ke - $[_S[NP]$ - Y

1 2 3 4

SC: 1 2 3 4 $\Rightarrow$ 1 3 2 4

This transformation optionally moves the coordinating conjunction ke, when it is conjoining two sentences, to the right of the initial noun phrase of the following sentence.

13.3.12.

T12. SENTENCE NOMINALIZATION

SD: X - $\left\{ \begin{array}{l} -t \\ -ya \end{array} \right.$ - $Y]_S]_{NP}$ - Z

1 2 3 4

a) SC: 1 2 3 4 $\Rightarrow$ 1 3 4

b) SC: 1 2 3 4 $\Rightarrow$ 1+baq 3 4

This transformation operates on sentences which are embedded in noun phrases, either deleting the final aspect suffix of the verb, or replacing it by the suffix -baq.

13.3.13.

T13. OBJECT SUFFIX INSERTION

SD: $\begin{bmatrix}+n \\ +animate\end{bmatrix}_{NP}$ Pred Phrase

1

SC: 1 ⇒ 1+il

This transformation adds the object marker -il to a Noun Phrase which is dominated by Predicate Phrase, but not by an intervening node like Predicate; predicate nominals do not take -il.

13.3.14.

T14. ?OL-INSERTION

SD: $S]_{NP}$ - VP

1 2

SC: 1 2 ⇒ 1+?ol 2

This transformation optionally inserts a pronoun which is anaphoric to a preceding nominalized sentence.

13.3.15.

T15. OBJECT FRONTING

SD: X - $NP]_{\text{Pred Phrase}}$ - Y

1 2 3

SC: 1 2 3 ⇒ 2 1 3

This transformation, possibly involved with focus or emphasis, optionally moves an object noun phrase to the end of a sentence.

13.3.16.

T16. NP EXTRAPOSITION

SD: X - NP - Y where Y is not a postposition or possessive

1 2 3 element

SC: 1 2 3 ⇒ 2 3 1

This transformation optionally moves a subject or object noun phrase to the end of the sentence.

13.3.17.

T17. CONJOINING SUFFIX INSERTION

a) SD: X - V - Y - -t / -ya - S - Z

1 2 3 4 5 6

SC: 1 2 3 4 5 6 ⇒ 1 2 3+ { btonwa / day / fed(miṭ) / fla / miṭ / qat / yukin } 5 6

b) SD: X - Adjective - S - Y

1 2 3 4

SC: 1 2 3 4 ⇒ 1 2 { btonwa / day / fed(miṭ) / fla / miṭ / qat / yukin } 3 4

This transformation inserts a final position suffix indicating various types of sentence conjoining into sentences which are thus conjoined. The suffix may be inserted after either a verb or adjective predicate.

13.3.18.

T18. IMPERATIVE

SD: X - [2nd Person]$_{NP}$]$_S$ - Y - -t - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3+a 5

This transformation can replace the final position suffix -t with -a, producing an imperative sentence, if the subject of the sentence is a second person noun phrase.

13.3.19.

T19. HORTATIVE

SD: X - [1st Person]$_{NP}$]$_S$ - Y - -t - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3+dowa 5

This transformation replaces the -t 'imperfective' suffix with the hortative suffix, forming a hortative sentence, if the subject is a first person noun phrase.

13.3.20.

T20. OPTATIVE

a) SD: X - V - Y - -t - Z
1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1+ʔta 2+hine 3 5

b) SD: X - V - Y - -ya - Z
1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 $\left\{\begin{matrix}ʔta \\ laqʔ\end{matrix}\right\}$ 2 3 4+y 5

This transformation forms an optative sentence by either a) replacing the imperfective suffix with the imperfective optative suffix -hine and preposing ʔta to the verb, or by b) following the perfective suffix with the perfective hortative enclitic -y, and preposing an optional ʔta or laqʔ to the verb.

13.3.21.

T21. INABILITIVE

a) SD: X - V - Y - -kle - Z
-t
-ya

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3+k'li 5

b) SD: X - Adjective - Y

1 2 3

SC: 1 2 3 ⇒ 1 2+k'li 3

This transformation either replaces a final position aspect suffix, or follows a predicate adjective with the k'li 'inabilitive' suffix.

13.3.22.

T22. FUTURE CONDITIONAL

SD: X - V - Y - -t - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3+da 5

This transformation replaces the imperfective aspect suffix -t with the future conditional suffix -da.

13.3.23.

T23. INTERROGATIVE

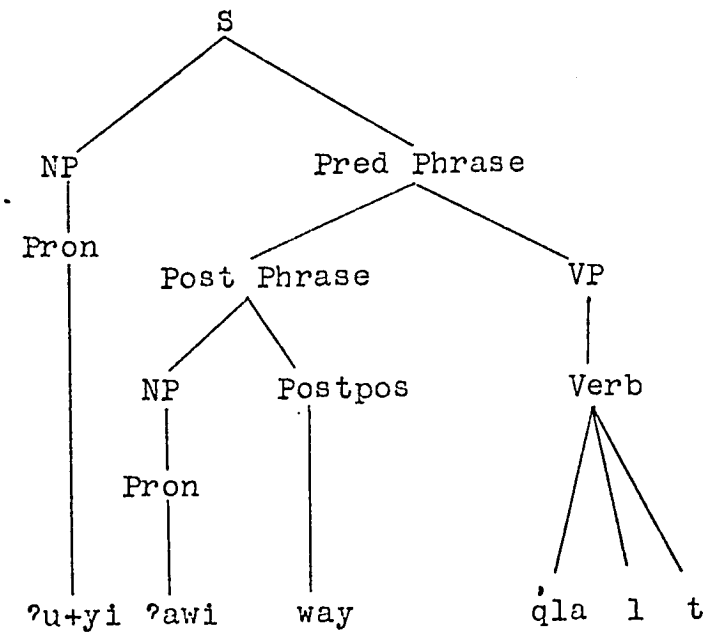
a) SD: W - [Interrog] - X - V - Y - -t - Z
1 2 3 4 5 6 7

SC: 1 2 3 4 5 6 7 ⇒ 1 2 3 4 5 6+?e 7

b) SD: W - [Interrog] - X - V - Y - n+do - Z
1 2 3 4 5 6 7

SC: 1 2 3 4 5 6 7 ⇒ 1 2 3 4 5 6 7

This transformation forms an interrogative sentence by following the imperfective suffix with the enclitic ?e, if there is an interrogative word in the sentence. As an example:



PRON DEL ʔawiway q̓la+l+t

INTERROG ʔawiway q̓la+l+t+ʔe

P rules ʔàwiway q̓lálitʔe 'What did he die from?'

Note that if the sentence to be interrogativized has a quotative evidential, it will undergo part (b), leaving the sequence of morphemes unchanged:

ʔàwiway q̓lálindo

13.3.24.

T24. YES OR NO INTERROGATIVE

SD: X - Verb - Y

1 2 3

SC: 1 2 3 ⇒ 1 2+ʔha 3

This transformation produces a question to which the appropriate answer is yes or no (ʔíy or hĩʔĩ́).

Example:

ʔu+yi ba til+o+d+t

YES/NO ʔu+yi ba til+o+d+t+ʔha

P rules ʔùyi ba tílodit ʔha 'Is he going to leave?'

13.3.25.

T25. LOCATIVE INTERROGATIVE

SD: X - V - Y - $\left\{\begin{matrix}-t\\-ya\end{matrix}\right\}$ - Z

1 2 3 4 5

SC: 1 2 3 4 5 ⇒ 1 2 3+we 5

This transformation forms an interrogative sentence corresponding to an English sentence 'where?' or any sentence where the element being questioned is locative.

Example:

ma x̣ol+o+t

LOC INT ma x̣ol+o+we 'Where are you going?'

13.3.26.

T26. SENTENCE EXTRAPOSITION

SD: $X - S]_{NP} - Y$

1 2 3

SC: 1 2 3 ⇒ 1 3 2

This transformation moves a sentence embedded in a Noun Phrase to the end of the highest matrix sentence.

13.3.27.

T27. PREDICATE FRONTING

SD: $X - \left\{\begin{matrix}\text{Predicate Phrase} \\ S\end{matrix}\right\} - Y$

1 2 3

SC: 1 2 3 ⇒ 2 1 3

This transformation moves a Predicate Phrase or an embedded sentence to the front of the sentence, possibly for emphasis.

13.3.28.

T28. SUFFIX SEQUENCE REORDERING

SD: X - V - [Suf] ... - Y - Z
1 2 3...n n+1 n+2

where SD parts 3...n are each a verb suffix, and Y is not a verb suffix

SC: 1 2 3...n n+1 n+2 $\Rightarrow$ 1 2 SURF SUF SEQ n+1 n+2

where SURF SUF SEQ is the set of suffixes in 3...n, reordered by matching to the Surface Suffix Ordering Constraint

This is, strictly speaking, not a transformation in the current formal sense of the term. It is a schema which takes as input the sequence of verb suffixes generated by the phrase structure and transformational rules, and reorders them according to the Surface Suffix Ordering Constraint, the surface ordering of suffixes given in Chapter Five. The claim is that the ordering of the

suffixes is not distinctive in the deep structure, except insofar as it is necessary to effect some ordering so that transformations and coocurrence restrictions can operate properly.

13.4. Summary of Transformations

T1. Causative Reduction

T2. Reflexivization

T3. Reciprocalization

T4. Equi-NP Deletion

T5. Pronoun Deletion

T6. Plural Source Concordance

T7. Plural Figure Concordance

T8. Non-singular NP Concordance

T9. Dual NP Concordance

T10. Negative Movement

T11. Ke-Movement

T12. Sentence Nominalization

T13. Object Suffix Insertion

T14. ?ol Insertion

T15. Object Fronting

T16. NP Extraposition

T17. Conjoining Suffix Insertion

T18. Imperative

T19. Hortative

T20. Optative

T21. Inabilitive

T22. Future Conditional

T23. Interrogative

T24. Yes/No Interrogative

T25. Locative Interrogative

T26. Sentence Extraposition

T27. Predicate Fronting

T28. Suffix Sequence Reordering

Chapter 14. Sample Text

14.1. Introduction

In this chapter, a short text will be presented, exemplifying many of the elements and processes discussed in the grammar.

First, the text will be presented in a more-or-less systematic phonetic transcription(except that pretonic epenthetic vowels and stress will not be indicated), along with a free translation. This will be followed by a morphemic analysis of each sentence, with deep structure phrase markers and indications of the transformations that operate on each sentence.

The text is a narrative spoken in July, 1965.

14.2. Text and Translation

1) ʔuyil cnu fdiχqac̀it. 2) ʔa ba fdiqbaq te uyil bk̀olidit ʔa. 3) heqada bt̨eqa ʔuyi šiškidit, ʔol da fdiqas ʔa. 4) mt̨un ʔa mey, paʔšem mut̨in walqat, paʔšem mut̨in ke walqat, χ̣q̀omfo ʔuχ̣qat k̀li qat, wiy sen mey blomat, ʔumtimfo beqat. 5) ʔa·ba χ̣qac̀it wiy q̀owc̀ikle, xa qlakmat, bxe c̀amat, xac̀it c̀amat. 6) cada wil da c̀iχ̣otkle. 7) wiy sen blomat, ke χ̣q̀omfo χ̣olʔyeqat, ke wil ʔol ʔuχ̣qat kyewkiqya. 8) ʔow, ʔa t̨alkʔo t̨al paʔšem ke danwidi mut̨in ké, wiy ke mey

ʔawda da q̓owc̓es. 9) wil ʔwalqat. 10) bxe c̓amal, xa q̓owic̓, ʔuχ̣qat ʔwalqat wil. 11) heqada bcilin, memla bṯoyilki, heqada wali, ʔa·ba ʔuχ̣qa kyewkiqdit, ʔxotit. 12) ʔa da fdiqas.

1) He wants to learn our language. 2) I'll tell him just as much as I know. 3) I don't know how much he's going to ask. 4) A long time ago, when I was ten years old, there were no white people around. We lived here alone, just us Indians. 5) We did everything we wanted to. We went fishing, deer hunting, mudhen hunting. 6) No one bothered us. 7) We were here alone, but then the white man came. They stopped us from doing all that. 8) I'm fifty-eight years old now. We don't do anything here anymore. 9) They stopped us. 10) Deer hunting, fishing... They stopped us from doing everything. 11-12) I don't know how long from now it will be. I guess they'll stop us from doing everything.

14.3. Morphological Analysis

1) ʔuyi+il 3 sg. masc obj. pron.

cnu noun 'language, word'

f+di+q_c+q_c+$c̓_r$+t 'he teaches himself, knows' fdi+q_c 'know'

2)
?a 1 sg. subj. pronoun

ba subject particle

f+di+q_c+baq verb 'what I know'

te adverb 'just, only'

?u+yi+il 3 sg. masc. pronoun, object

b+ko+l+d+t 'will tell' verb

?a 1 sg subject pronoun

3) heqada interrogative adverb 'how'

bṭe+q_c adverb 'size, much' from verb bṭe- 'grow'

?u+yi 3 sg masc subject pronoun

šiš+k_s+d+t 'will ask' verb

?o+il 3 sg object pronoun 'that'

da f+di+q_c+s verb 'don't know'

?a 1 sg subject pronoun

4) mṭu+n adverb 'long ago'

?a 1 sg subject pronoun

mey adverb 'here'

pa?šem numeral 'ten'

muṭin noun 'year'

wa+l+qat verb 'when I was' wa- 'l goes, walks'

pa?šem

muṭin

ke coordinating conjunction

wa+l+qat

x̣q̓o+mfo noun 'white men'

ʔux̣qat adjective 'all, every'

k̓li inabilitive, here 'none at all'

qat conjoining element, 'when'

wi+ay 1 pl subject pronoun

sen adverb 'alone'

mey adverb 'here'

blo+m_p+t verb 'sit, live'

ʔumti+mfo noun 'people, Indians'

beqat verb 'just, only'

5) ʔa·ba pronoun 'materials, paraphernalia' here 'everything' or 'anything'

x̣qa+$c̓_p$+t verb 'like, want to'

wi+ay 1 pl subject pronoun

q̓o+w+$c̓_p$+kle 'we always did'

xa noun 'fish'

qla+k_p+m_p+t verb 'we caught'

bxe noun 'deer'

c̓a+m_p+t verb 'we hunted'

x̣ac̓it noun 'mudhen, cootch'

c̓a+m_p+t verb 'we hunted'

cada pronoun 'someone'

wi+il 1 pl object pronoun

da ċi+x̣ot+kle verb 'they didn't do' here 'bother'

7) wi+ay 1 pl subject pronoun

sen adverb 'alone'

blo+m_p+t verb 'lived'

ke coordinating conjunction

x̣q̇o+mfo noun 'white men'

x̣ol+ʔye+q_p+t verb 'came'

ke coordinating conjunction

wi+il 1 pl object pronoun

ʔo+il 3 sg object pronoun 'that'

ʔux̣qat adjective 'all, every'

k+ye+w+k_s+q_c+ya verb 'they stopped us'

8) ʔow sentence adverbial 'well'

ʔa 1 sg subject pronoun

ṯalkʔo numeral 'five

ṯal connective 'times

paʔšem numeral 'ten'

ke coordinating conjunction

danwidi numeral 'eight'

(5x10+8=58)

muṯin noun 'year'

ké adverb 'now'

wi+ay 1 pl subject pronoun

ke coordinating conjunction

mey adverb 'here'

ʔaw+da pronoun 'something, anything'

da q̓o+w+c̓$_p$+s verb 'we don't do'

9)
wi+il 1 pl object pronoun

ʔ+wa+l+q$_c$+t 'they stopped us'

10) bxe noun 'deer'

c̓a+m$_p$+l verb 'hunt'

xa noun 'fish'

q̓o+w+c̓$_p$ verb 'doing'

ʔuχ̣qat adjective 'all, every' here as pronoun 'everything'

ʔ+wa+l+q$_c$+t

wi+il

11) heqa+da adverb 'how'

bcilin adverb 'long' from verb bci+l+n 'long'

memla adverb 'from here, from now(time or space)'

bt̓oyilki adverb 'backwards' from verb b+t̓oyi+l+k$_s$
'go to behind, backwards'

heqa+da wali adverb 'how long' from verb wa+l '1 goes'

ʔa•ba pronoun 'everything'

ʔuχ̣qa adjective 'all' (alternate form)

k+ye+w+k$_p$+d+t verb 'stop'

ʔxot+t verb 'guess'

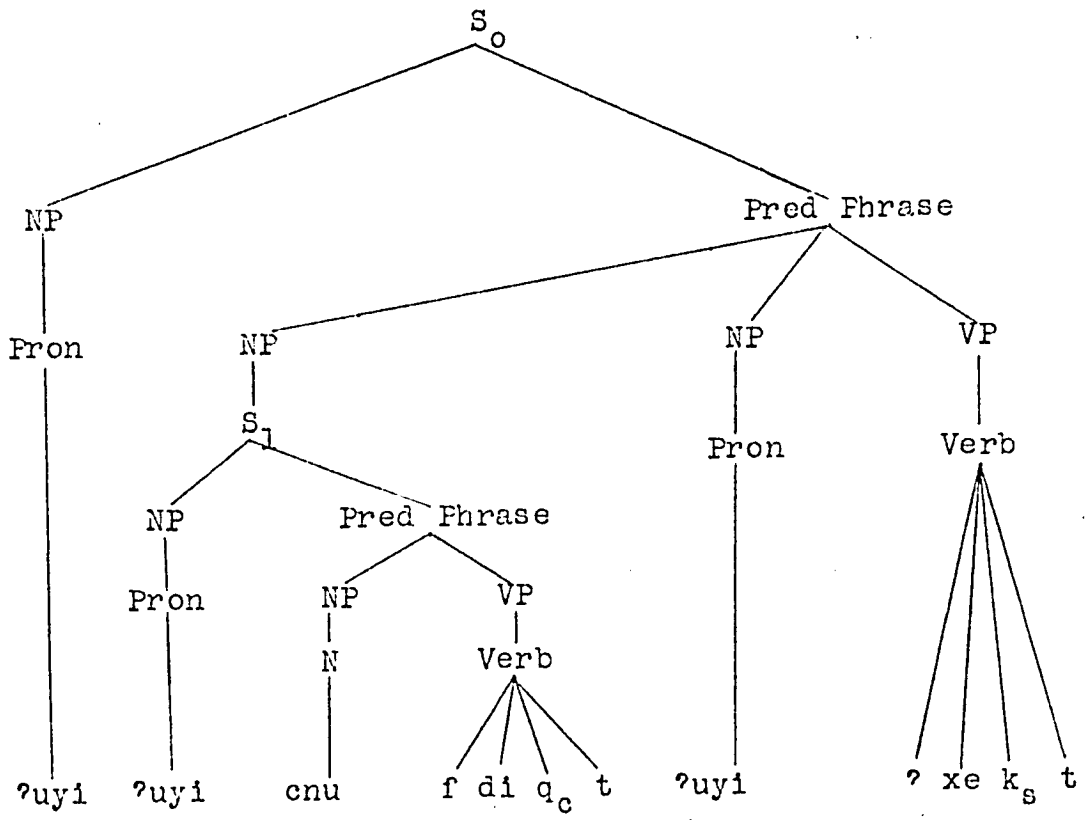
12) ʔa 1 sg subject pronoun

da f+di+q_c+s verb 'not know'

14.4. Syntactic Analysis

In this section deep structure phrase markers and transformational derivations will be given for each sentence.

1) ʔuyil cnu fdix̣qac̓it.



DS: ʔuyi ʔuyi cnu f+di+q_c+t ʔuyi ʔ+xe+k_s+t

T1-Caus ʔuyi ʔuyi cnu f+di+q_c+t+q_c ʔuyi

T2-Refl ʔuyi ʔuyi cnu f+di+q_c+t+q_c+$\dot{c}_r$ ʔuyi

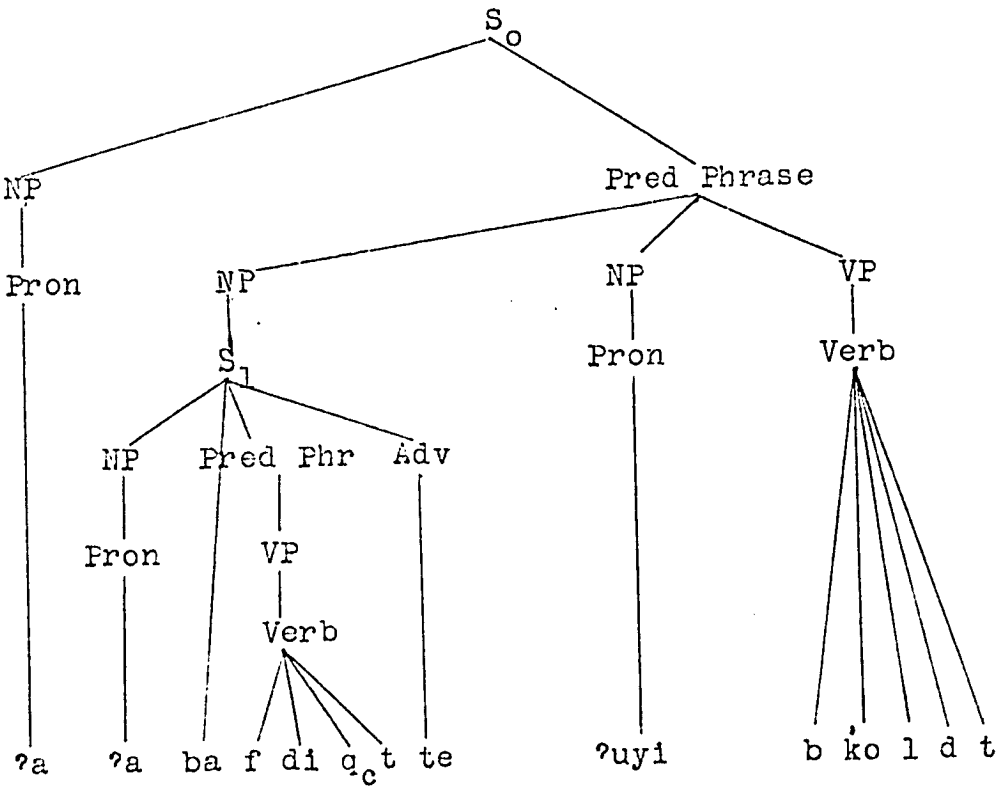
T4-EqNPdel (2 operations)

ʔuyi cnu f+di+q_c+t+q_c+$\dot{c}_r$

T13-OSI ʔuyi+il cnu f+di+q_c+t+q_c+$\dot{c}_r$

T28-SSR ʔuyi+il cnu f+di+q_c+q_c+$\dot{c}_r$+t

2) ʔa ba fdiqbaq te ʔuyil bk̇olidit ʔa.



DS: ʔa ʔa ba f+di+q_c+t te ʔuyi b+ḳo+l+d+t

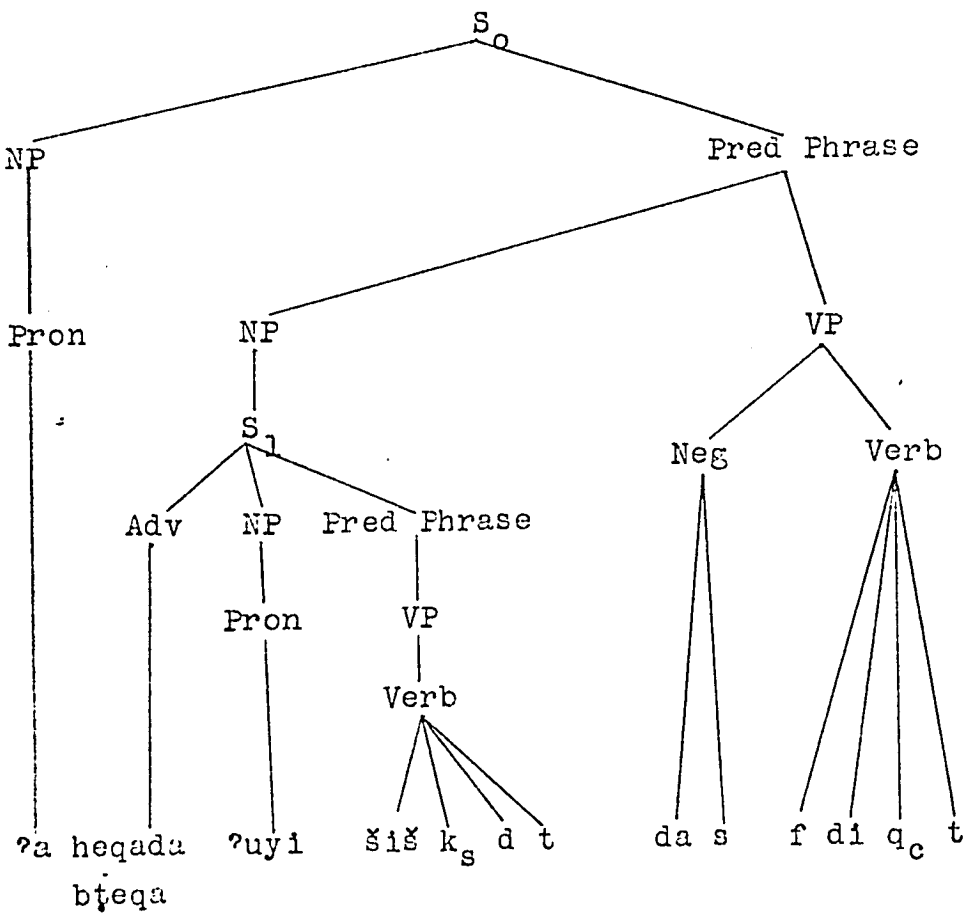
T12-SN ʔa ʔa ba f+di+q_c+baq te ʔuyi b+ḳo+l+d+t

T13-OSI ʔa ʔa ba f+di+q_c+baq te ʔuyi+il b+ḳo+l+d+t

T16-NPE ʔa ba f+di+q_c+baq te ʔuyi+il b+ḳo+l+d+t ʔa

T28-SSR vacuous operation

3) heqada bṭeqa ʔuyi šiškidit, ʔol da fdiqas ʔa.



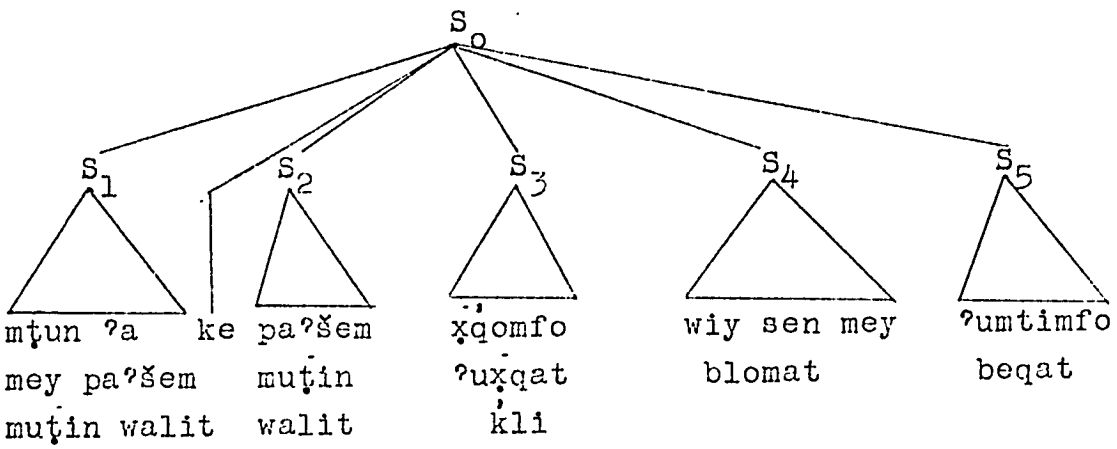
DS: ?a heqa+da bṭeqa ?uyi šiš+k_s+d+t da+s f+di+q_c+t

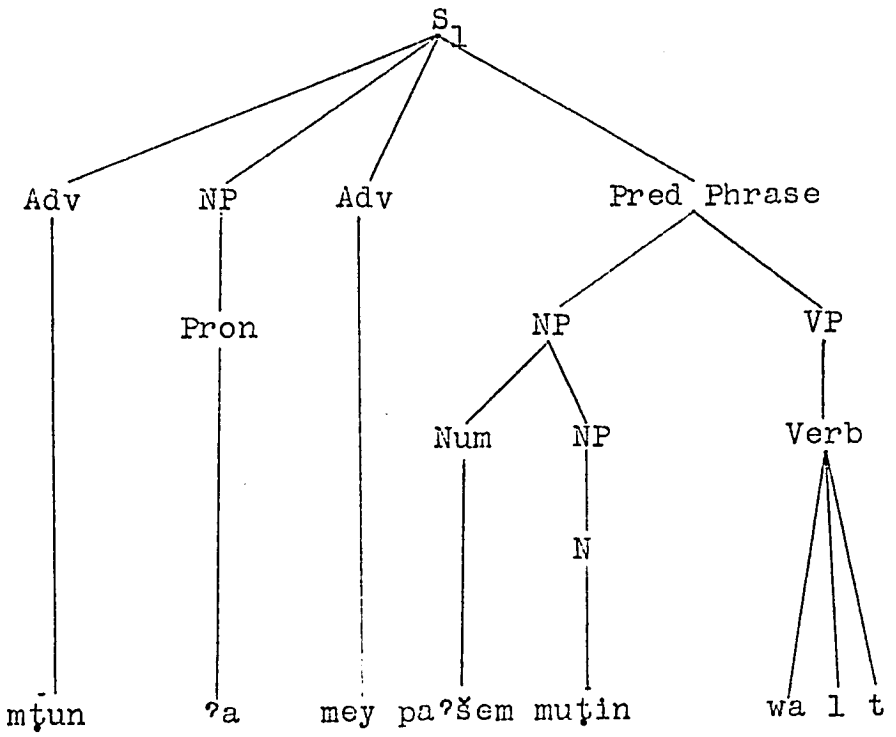
T14-OI ?a heqa+da bṭeqa ?uyi šiš+k_s+d+t ?ol da+s f+di+q_c+t

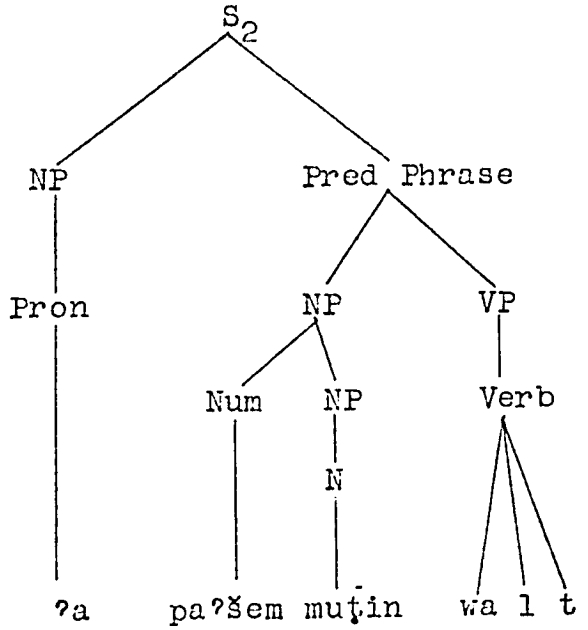
T16-NPE heqa+da bṭeqa ?uyi šiš+k_s+d+t ?ol da+s f+di+q_c+t ?a

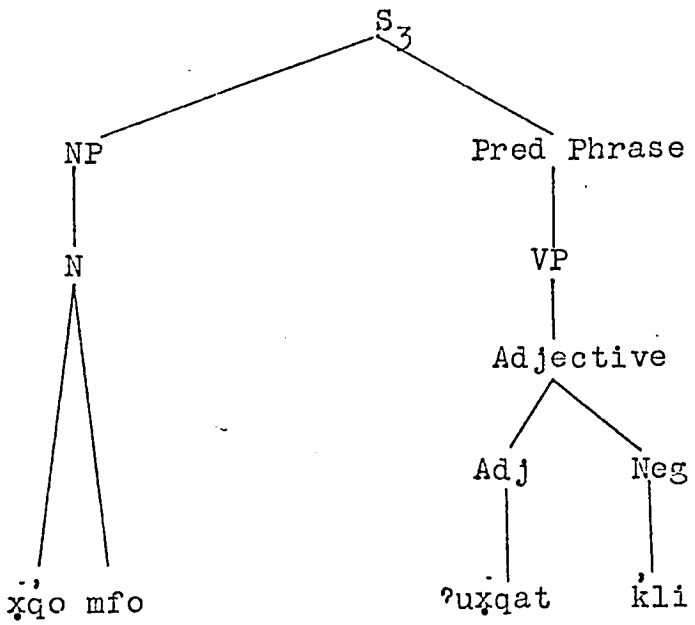
T28-SSR heqa+da bṭeqa ?uyi šiš+k_s+d+t ?ol da f+di+q_c+s ?a

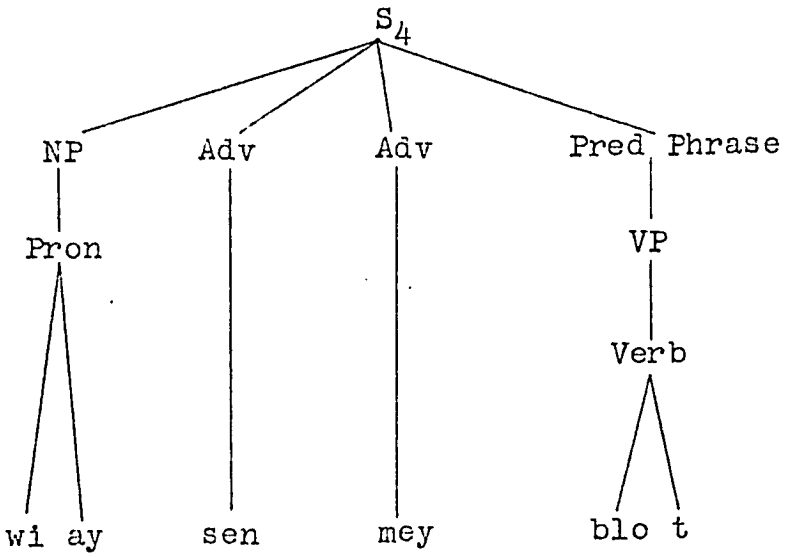
4) mṭun ?a mey, pa?šem muṭin walqat, pa?šem muṭin ke walqat, ẋ̣qomfo ?uẋ̣qat k̓li qat, wiy sen mey blomat, ?umtimfo beqat.

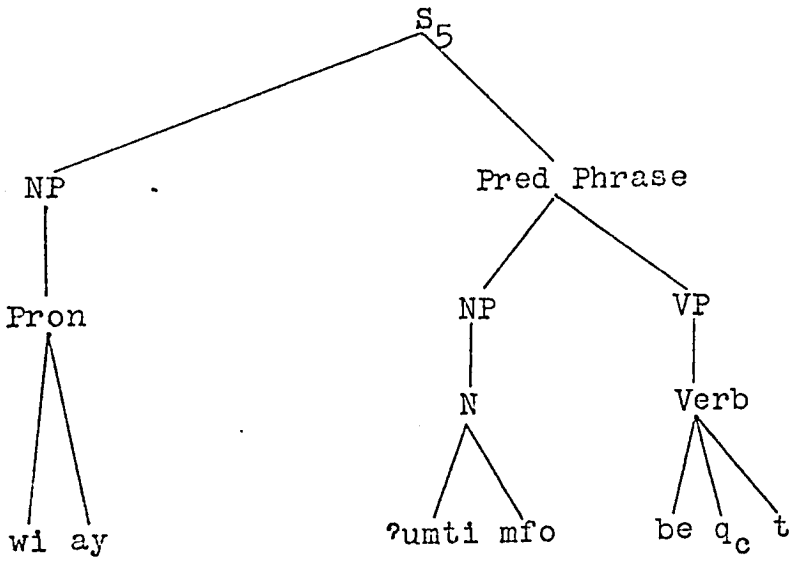












DS: S_1 mṯun ?a mey pa?šem muṯin wa+l+t ke

S_2 ?a pa?šem muṯin wa+l+t

S_3 x̣̓q̓o+mfo ?ux̣qat k̓li

S_4 wi+ay sen mey blo+t

S_5 wi+ay ?umti+mfo be+q_c+t

T17-CSI mṯun ?a mey pa?šem muṯin wa+l+qat

T4-ENPD ke pa?šem muṯin wa+l+t

T11-KM pa?šem muṯin ke wa+l+t

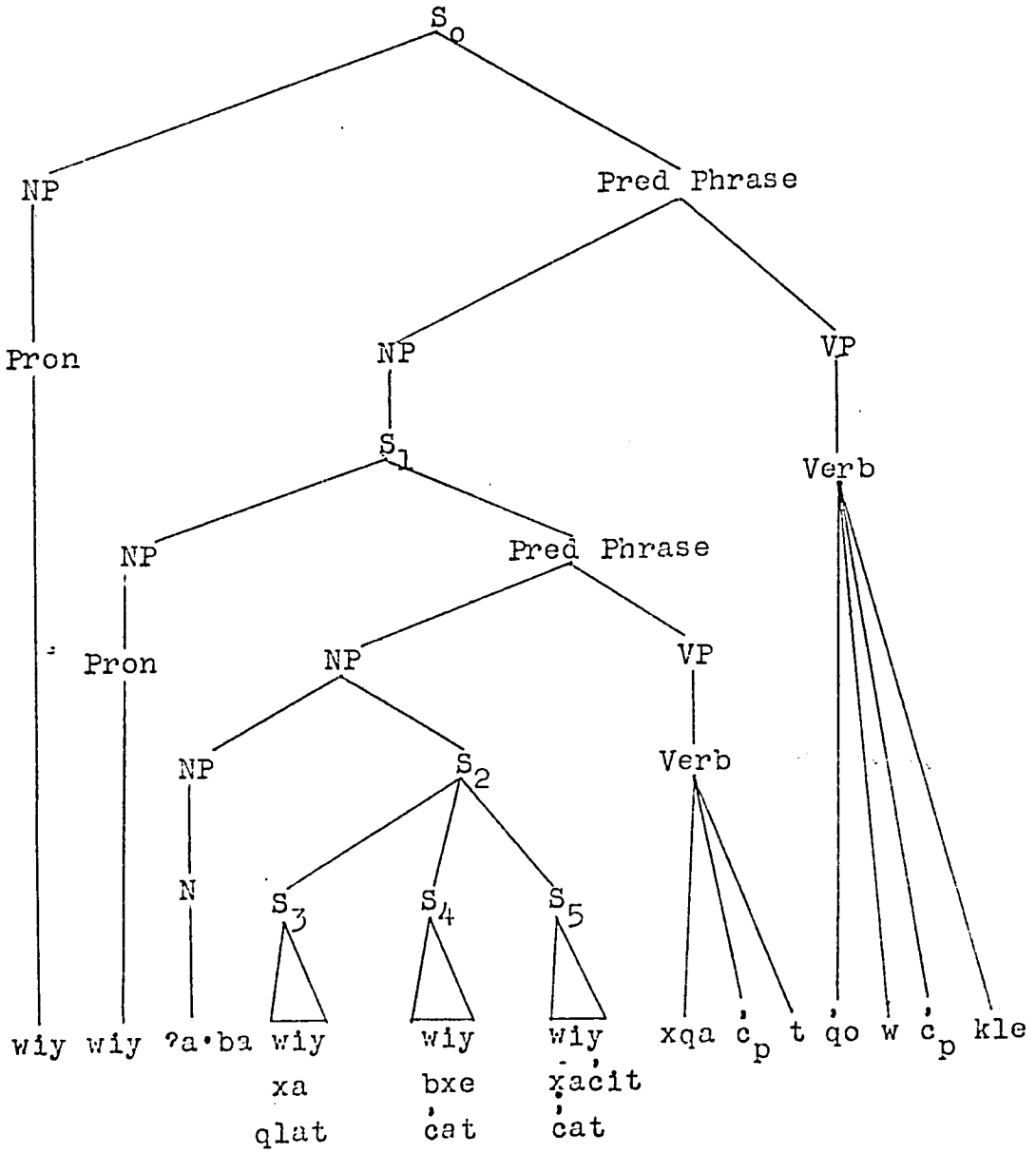
T17-CSI pa?šem muṯin ke wa+l+qat

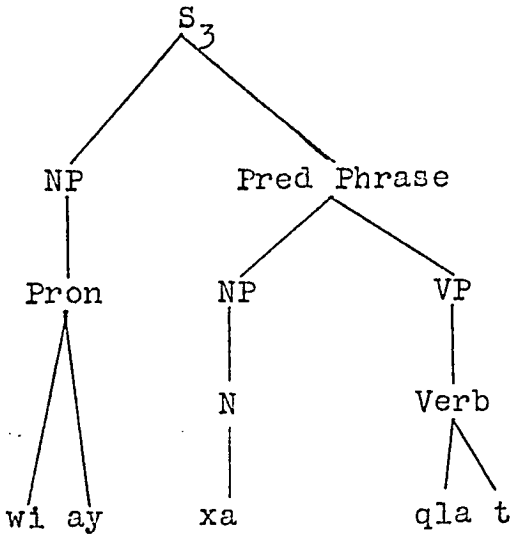
T6-PSC wi+ay sen mey blo+m_p+t

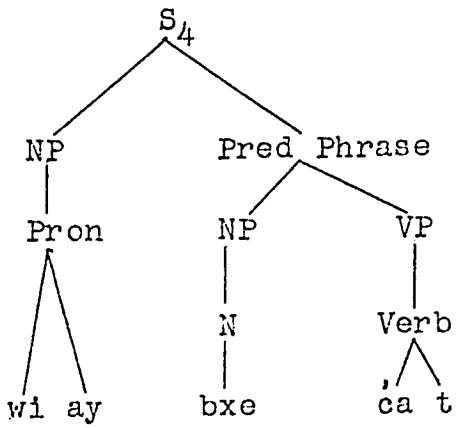
T17-CSI x̣̓q̓o+mfo ?ux̣qat k̓li qat

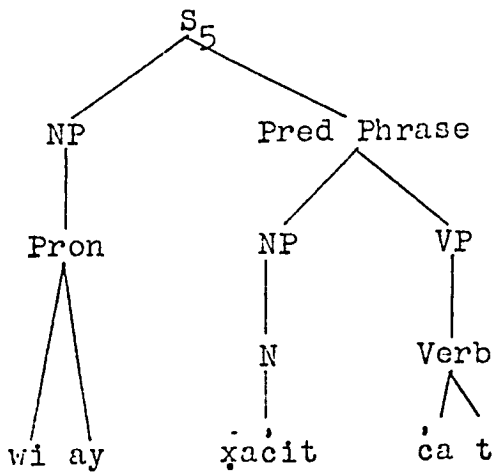
T28-SSR vacuous operation

5) ʔa•ba xqacit wiy qowcikle, xa qlakmat, bxe camat, xacit camat.









DS: wi+ay wi+ay ʔa•ba wi+ay xa qla+t wi+ay bxe ċa+t wi+ay x̣aċit ċa+t x̣qa+ċ$_p$+t q̇o+w+ċ$_p$+kle

T4-ENPD (4 operations)
wi+ay ʔa•ba xa qla+t bxe ċa+t x̣aċit ċa+t x̣qa+ċ$_p$+t q̇o+w+ċ$_p$+kle

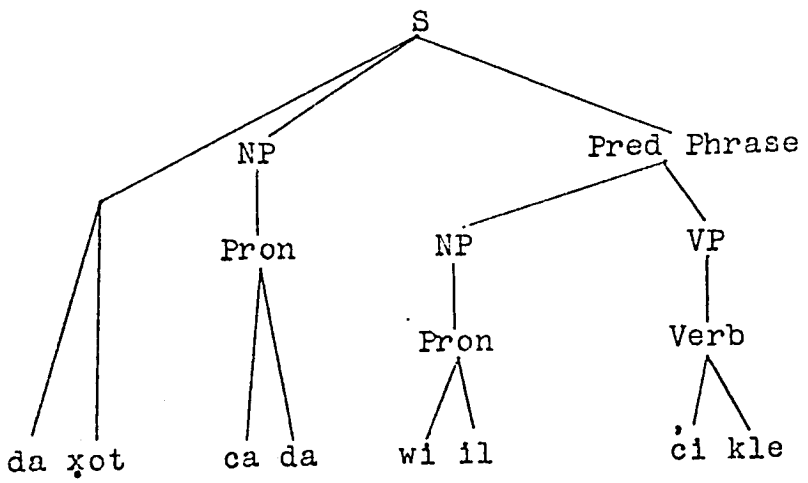
T6-PSC wi+ay ʔa•ba xa qla+k$_p$+m$_p$+t bxe ċa+m$_p$+t x̣aċit ċa+m$_p$+t x̣qa+ċ$_p$+t q̇o+w+ċ$_p$+kle

T26-SE wi+ay ʔa•ba x̣qa+ċ$_p$+t q̇o+w+ċ$_p$+kle xa qla+k$_p$+m$_p$+t bxe ċa+m$_p$+t x̣aċit ċa+m$_p$+t

T27-PF ʔa•ba x̣qa+ċ$_p$+t wi+ay q̇o+w+ċ$_p$+kle xa qla+k$_p$+m$_p$+t bxe ċa+m$_p$+t x̣aċit ċa+m$_p$+t

T28-SSR vacuous operation

6) cada wil da ċix̣otkle.

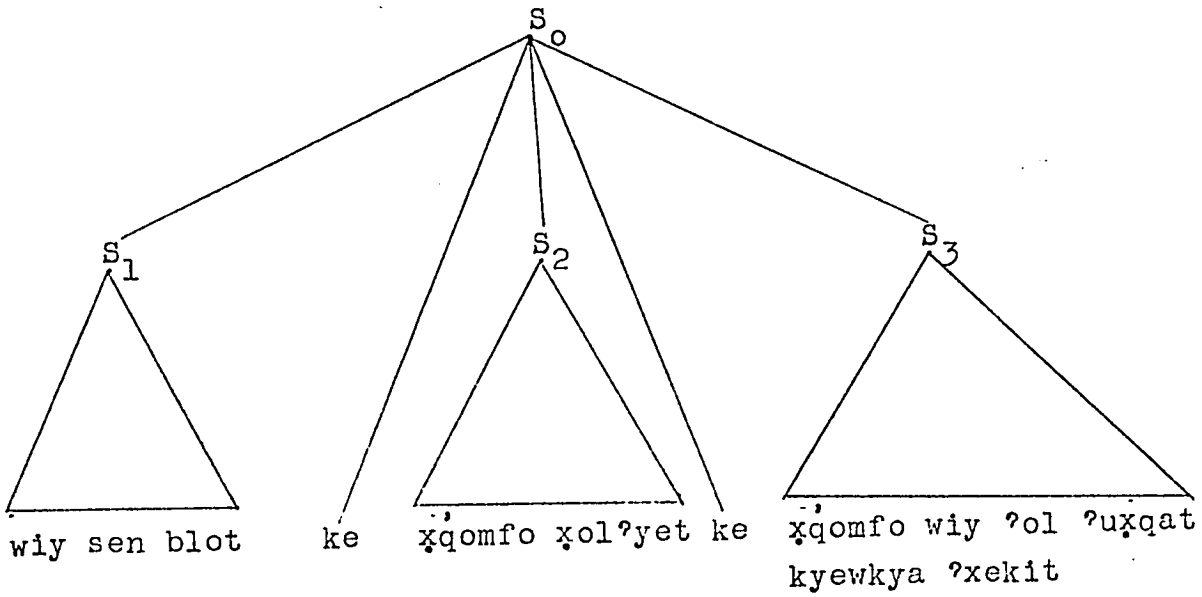


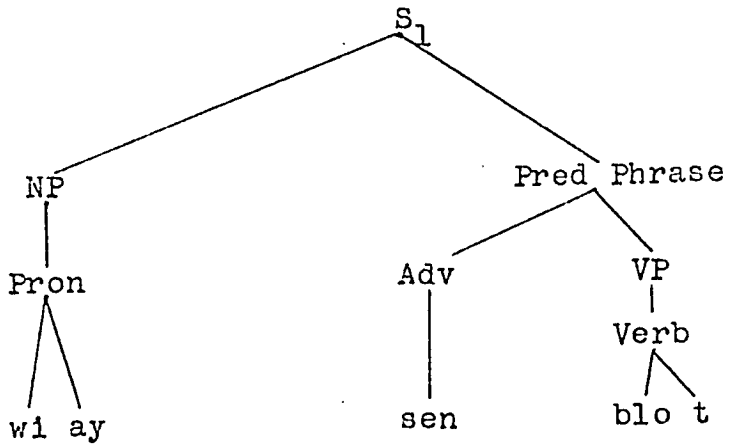
DS: da x̣ot ca+da wi+il c̓i+kle

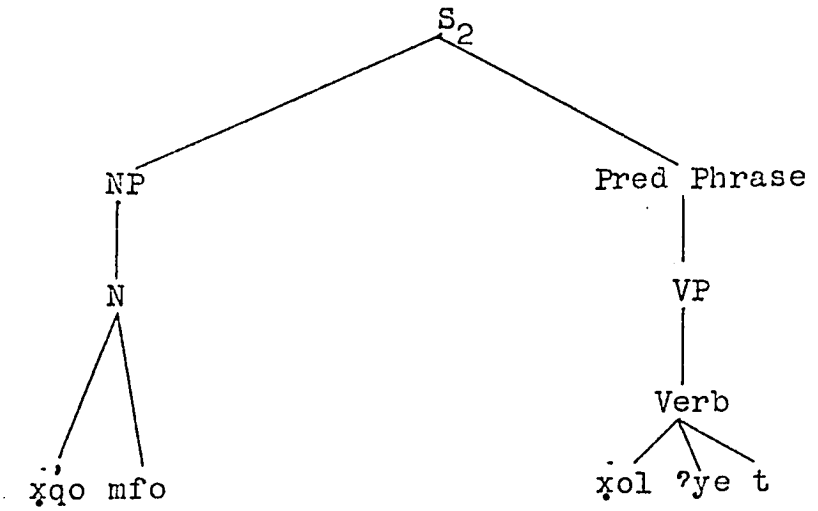
T10-NM ca+da wi+il da c̓+x̣ot+kle

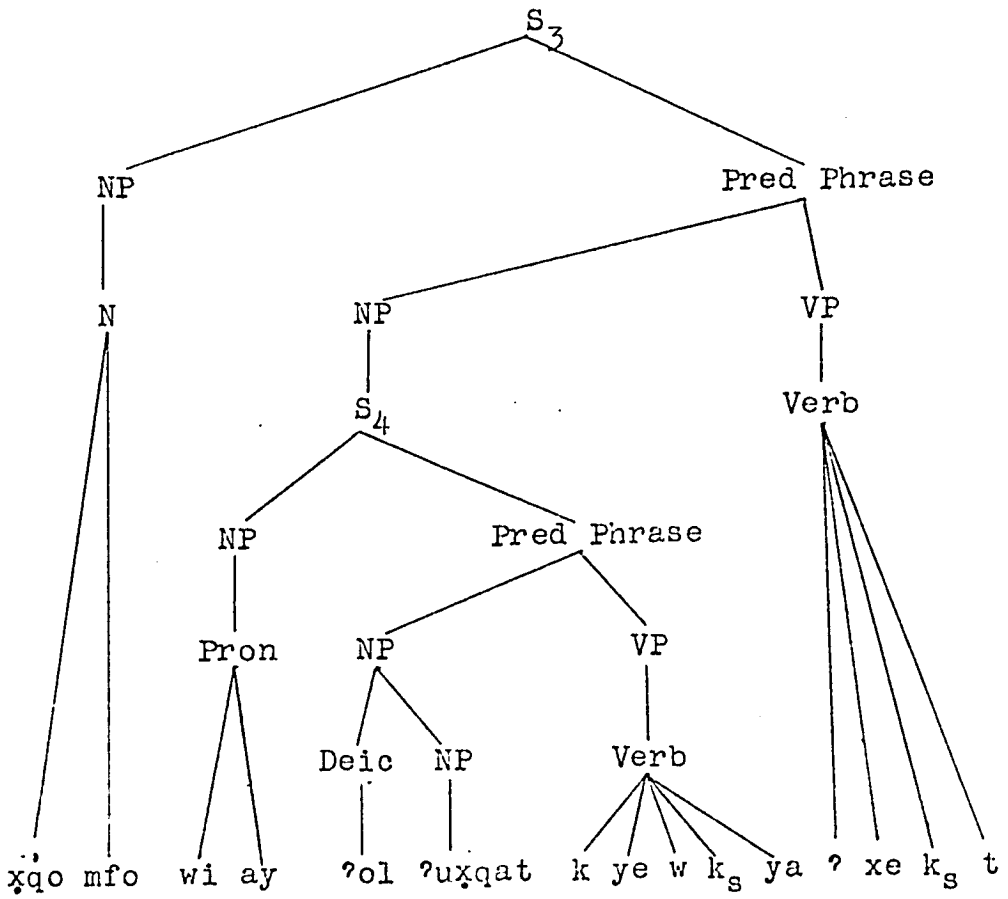
T28-SSR vacuous operation

7) wiy sen blomat, ke x̣q̓omfo x̣ol?yeqat, ke wil ?ol ?ux̣qat kyewkiqya.









DS: wi+ay sen blo+t ke x̣q̇o+mfo x̣ol+ʔye+t ke x̣q̇o+mfo
wi+ay ʔol ʔux̣qat k+ye+w+k_s+ya ʔ+xe+k_s+t .

T1-CR wi+ay sen blo+t ke x̣q̇o+mfo x̣ol+ʔye+t ke x̣q̇o+mfo
wi+ay ʔol ʔux̣qat k+ye+w+k_s+ya+q_c

T4-ENPD wi+ay sen blo+t ke x̣q̇o+mfo x̣ol+ʔye+t ke wi+ay
ʔol ʔux̣qat k+ye+w+k_s+ya+q_c

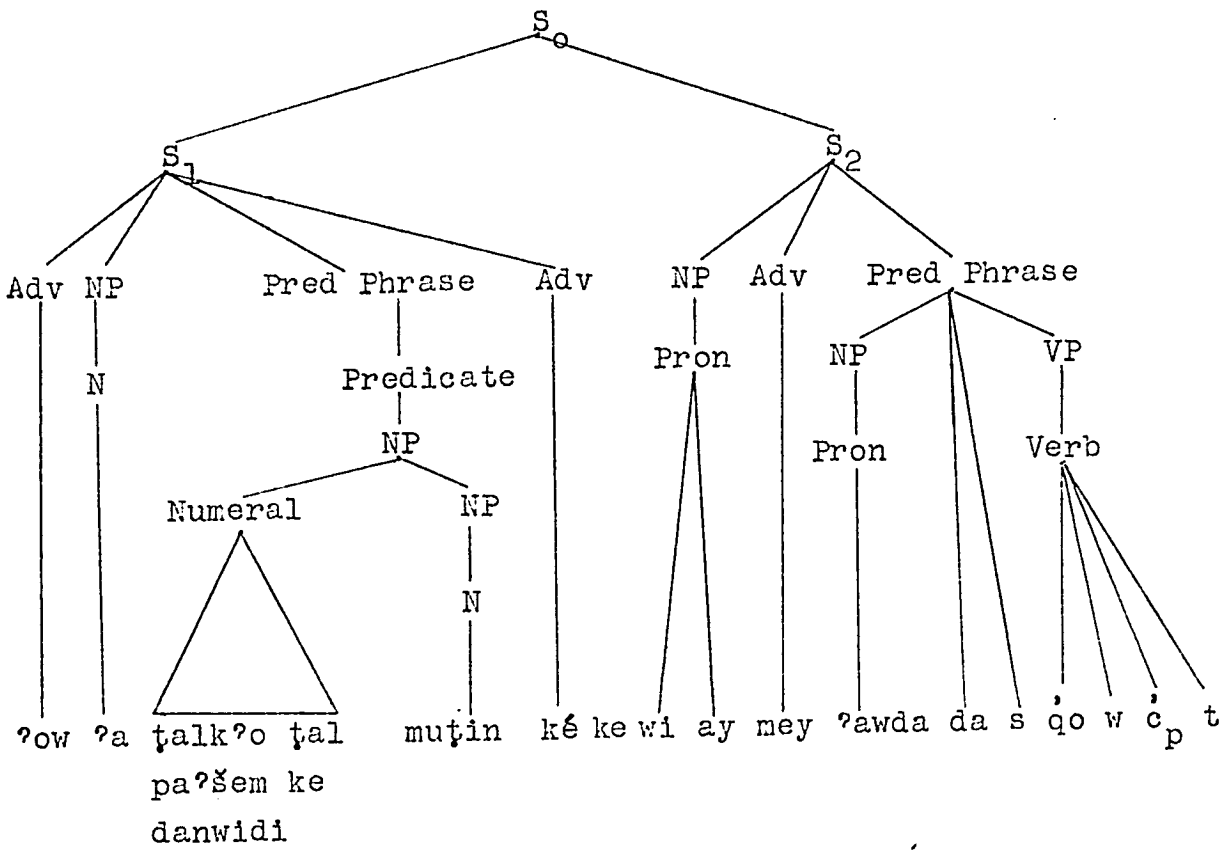
T6-PSC wi+ay sen blo+m_p+t ke x̣q̇o+mfo x̣ol+ʔye+t ke wi+ay
ʔol ʔux̣qat k+ye+w+k_s+ya+q_c

T8-NSC wi+ay sen blo+m_p+t ke x̣q̇o+mfo x̣ol+ʔye+q_p+t ke
wi+ay ʔol ʔux̣qat k+ye+w+k_s+ya+q_c

T13-OSI wi+ay sen blo+m_p+t ke x̣q̇o+mfo x̣ol+ʔye+q_p+t ke
wi+il ʔol ʔux̣qat k+ye+w+k_s+ya+q_c

T28-SSR wi+ay sen blo+m_p+t ke x̣q̇o+mfo x̣ol+ʔye+q_p+t ke
wi+il ʔol ʔux̣qat k+ye+w+k_s+q_c+ya

8) ʔow, ʔa ṭalkʔo ṭal paʔšem ke danwidi muṭin ké, wiy
ke mey ʔawda da q̇owc̣es.

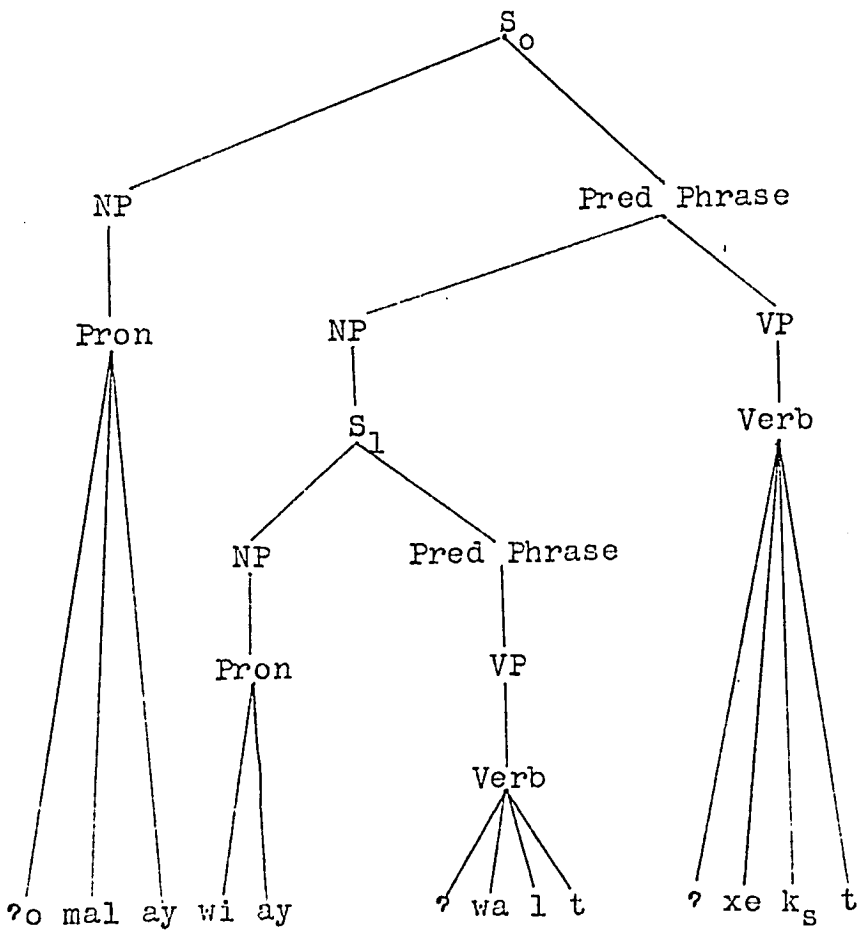


DS: ?ow ?a ţalk?o ţal pa?šem ke danwidi muţin ké ke wi+ay mey ?awda da+s q̓o+w+c̓$_p$+t.

T11-KM ?ow ?a ţalk?o ţal pa?šem ke danwidi muţin ké wi+ay ke mey ?awda da+s q̓o+w+c̓$_p$+t.

T28-SSR ?ow ?a ţalk?o ţal pa?šem ke danwidi muţin ké wi+ay ke mey ?awda da q̓o+w+c̓$_p$+s.

9) wil ?walqat.



DS: ?o+mal+ay wi+ay ?+wa+l+t ?+xe+k_s+t

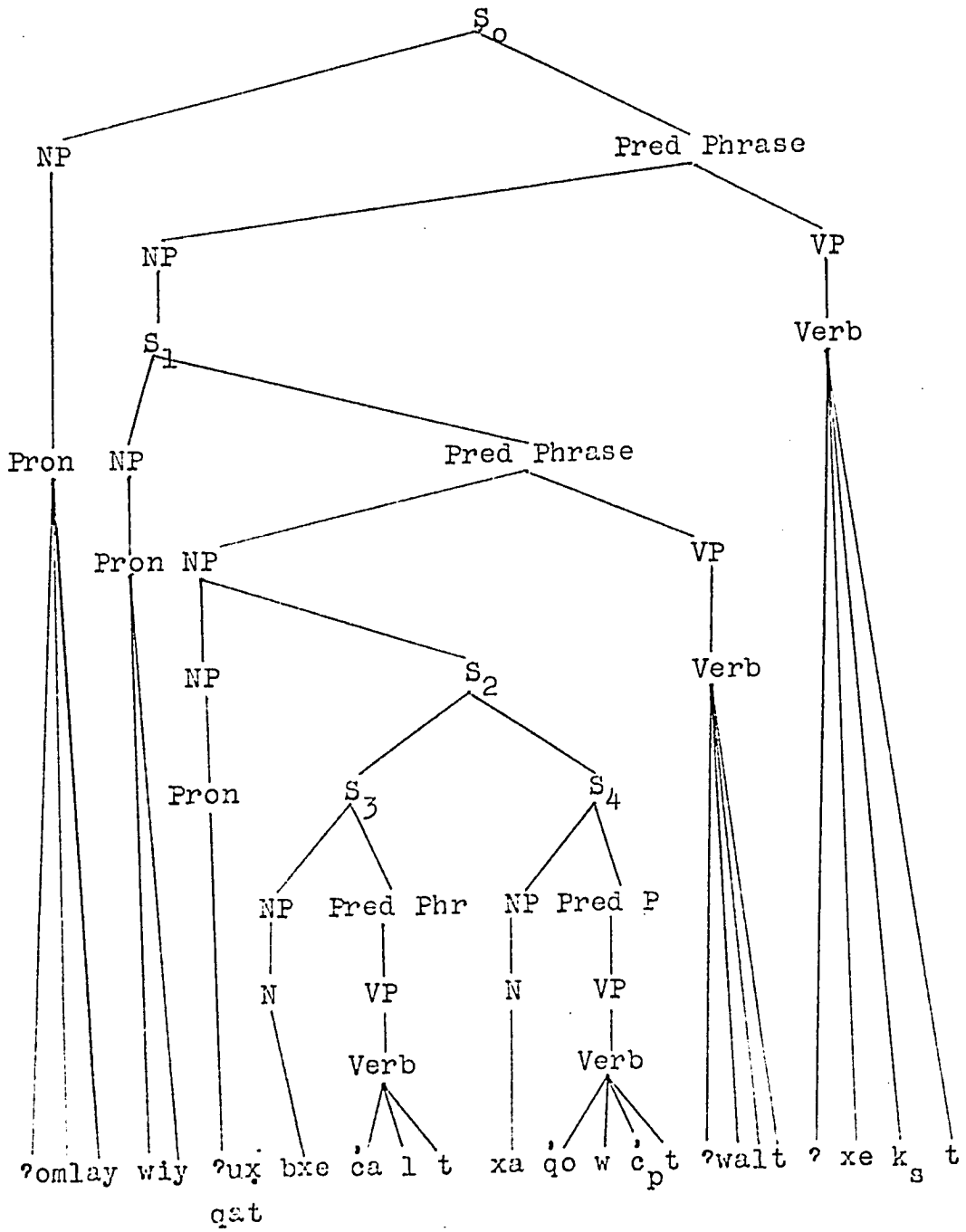
T1-CR ?o+mal+ay wi+ay ?+wa+l+t+q_c

T5-PD wi+ay ?+wa+l+t+q_c

T13-OSI wi+il ?+wa+l+t+q_c

T28-SSR wi+il ?+wa+l+q_c+t

10) bxe c̓amal, xa q̓owic̓, ʔux̌qat ʔwalqat wil.



DS: ʔo+mal+ay wi+ay ʔuχ̣qat bxe c̓a+l+t xa q̓o+w+c̓$_p$+t ʔ+wa+l+t ʔ+xe+k$_s$+t

T1-CR ʔo+mal+ay wi+ay ʔuχ̣qat bxe c̓a+l+t xa q̓o+w+c̓$_p$+t ʔ+wa+l+t+q$_c$

T5-PD wi+ay ʔuχ̣qat bxe c̓a+l+t xa q̓o+w+c̓$_p$+t ʔ+wa+l+t+q$_c$

T6-PSC wi+ay ʔuχ̣qat bxe c̓a+m$_p$+l+t xa q̓o+w+c̓$_p$+t ʔ+wa+l+t+q$_c$

T12-SN wi+ay ʔuχ̣qat bxe c̓a+m$_p$+l xa q̓o+w+c̓$_p$ ʔ+wa+l+t+q$_c$

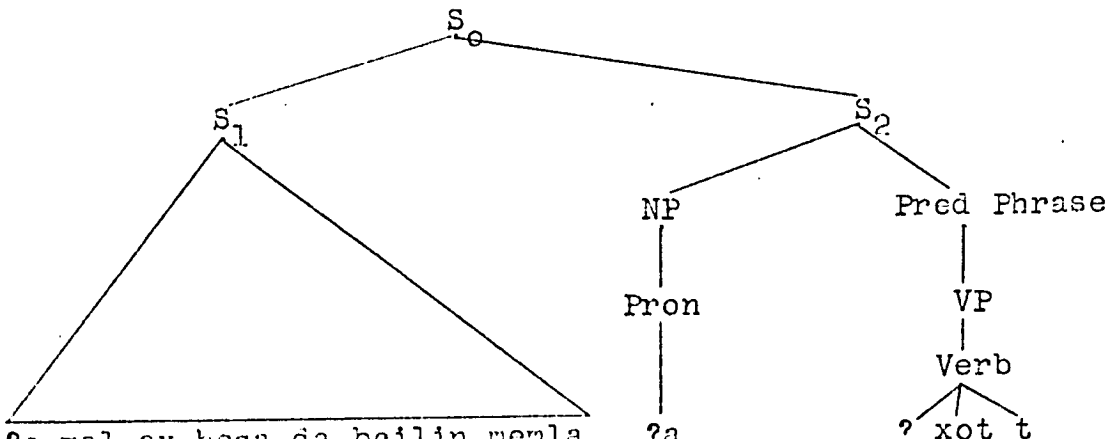
T13-OSI wi+il ʔuχ̣qat bxe c̓a+m$_p$+l xa q̓o+w+c̓$_p$ ʔ+wa+l+t+q$_c$

T16-NPE ʔuχ̣qat bxe c̓a+m$_p$+l xa q̓o+w+c̓$_p$ ʔ+wa+l+t+q$_c$ wi+il

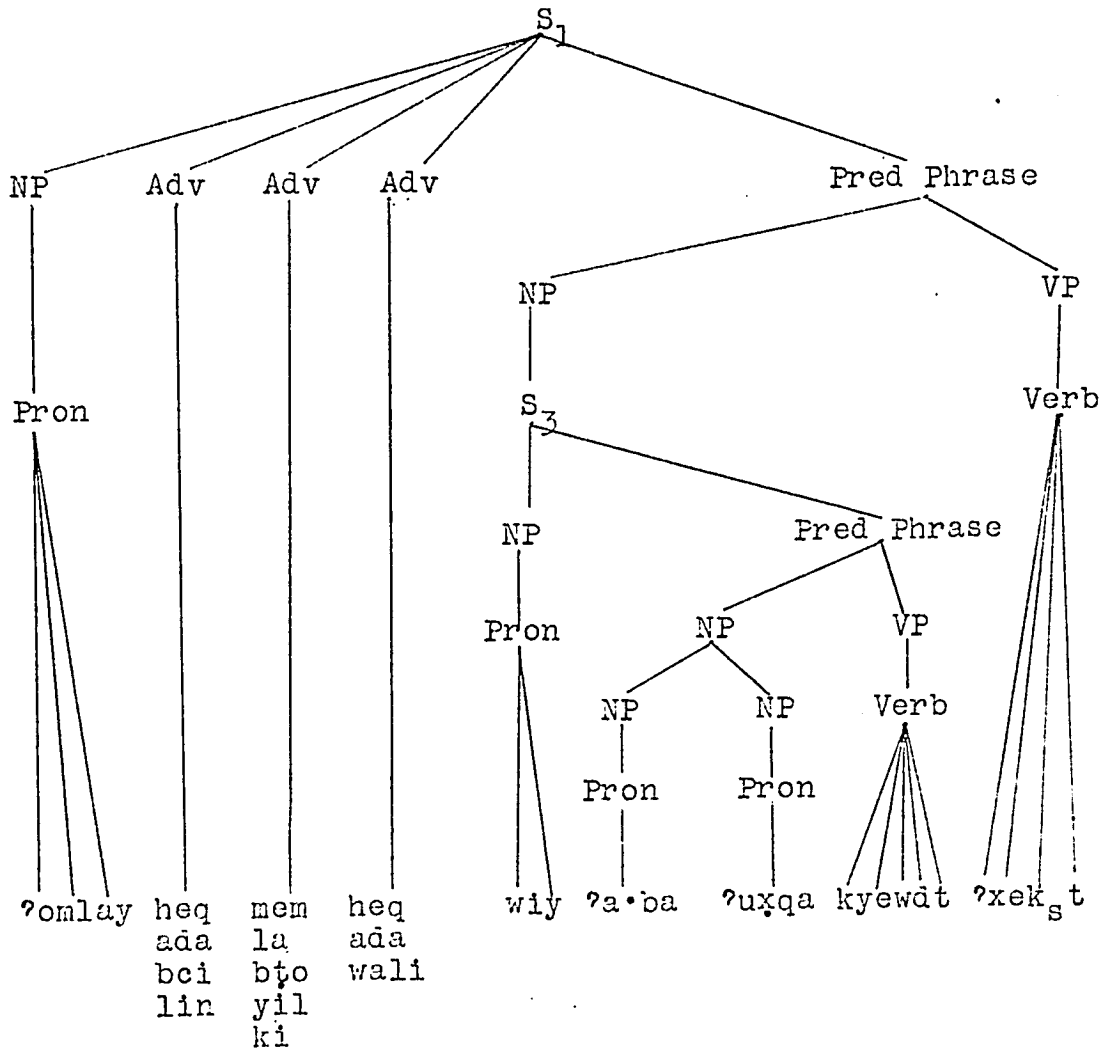
T27-PF bxe c̓a+m$_p$+l xa q̓o+w+c̓$_p$ ʔuχ̣qat ʔ+wa+l+t+q$_c$ wi+il

T28-SSR bxe c̓a+m$_p$+l xa q̓o+w+c̓$_p$ ʔuχ̣qat ʔ+wa+l+q$_c$+t wi+il

11) heqada bcilin, memla bt̓oyilki, heqada wali, ʔa·ba ʔuχ̣qa kyewkiqdit, ʔxotit.



ʔo mal ay heqa da bcilin memla bt̓oyilki heqa da wa l wi ay ʔa·ba ʔuχ̣qa k ye w d t ʔ xe k$_s$ t



DS: ?o+mal+ay heqa+da bcilin memla bṭoyilki heqa+da wa+l wi+ay ?a•ba ?uẋqa k+ye+w+d+t ?+xe+k_s+t ?a ?+xot+t

Tl-CR ?o+mal+ay heqa+da bcilin memla bṭoyilki heqa+da wa+l wi+ay ?a•ba ?uẋqa k+ye+w+d+t+q_c ?a ?+xot+t

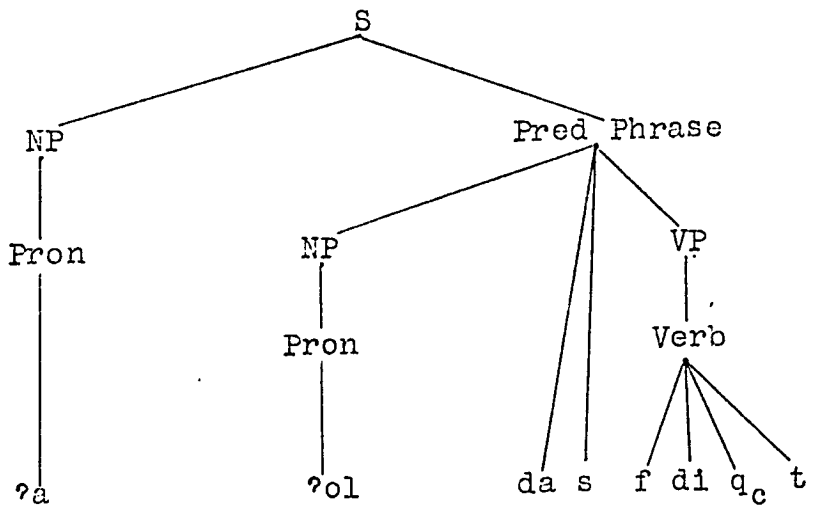
T5-PD (3 operations)

heqa+da bcilin memla bṭoyilki heqa+da wa+l ʔa•ba ʔuχ̣qa k+ye+w+d+t+q_c ʔ+xot+t

T7-PFC heqa+da bcilin memla bṭoyilki heqa+da wa+l ʔa•ba ʔuχ̣qa k+ye+k_p+w+d+t+q_c ʔ+xot+t

T28-SSR heqa+da bcilin memla bṭoyilki heqa+da wa+l ʔa•ba ʔuχ̣qa k+ye+w+k_p+q_c+d+t ʔ+xot+t

12) ʔa da fdiqas.



DS: ʔa ʔol da+s f+di+q_c+t

T5-PD ʔa da+s f+di+q_c+t

T28-SSR ʔa da f+di+q_c+s

BIBLIOGRAPHY

Barrett, S.A., The Ethno-geography of the Pomo and Neighboring Indians. University of California Publications in American Archaeology and Ethnology, Vol. 6, no. 1. February, 1908.

Chomsky, Noam, Aspects of the Theory of Syntax. Cambridge, Massachusetts, 1965.

Chomsky, Noam and Morris Halle, The Sound Pattern of English. New York, 1968.

Gruber, Jeffrey S., Studies in Lexical Relations. Unpublished Ph.D. Dissertation. Massachusetts Institute of Technology, September, 1965.

Mandelbaum, David G. editor, Selected Writings of Edward Sapir. University of California Press, Berkeley and Los Angeles, 1951.

McLendon, Sally, The Eastern Pomo Language. Unpublished Ph.D. Dissertation. University of California, Berkeley.

Moshinsky, Julius, "Historical Pomo Phonology" to appear in Proceedings of the First Conference on Hokan Languages, 1971.

Oswalt, Robert L., "The Internal Relationships of the Pomo Family of Languages" in XXXV Congreso Internacional de Americanistas. Mexico, 1964.

Oswalt, Robert L., Kashaya Grammar. Unpublished Ph.D. Dissertation. University of California, Berkeley.

Postal, Paul, Aspects of Phonological Theory. New York, 1968.

Stanley, Richard J., "Redundancy Rules in Phonology", Language, vol. 43(1967), pages 393-436.